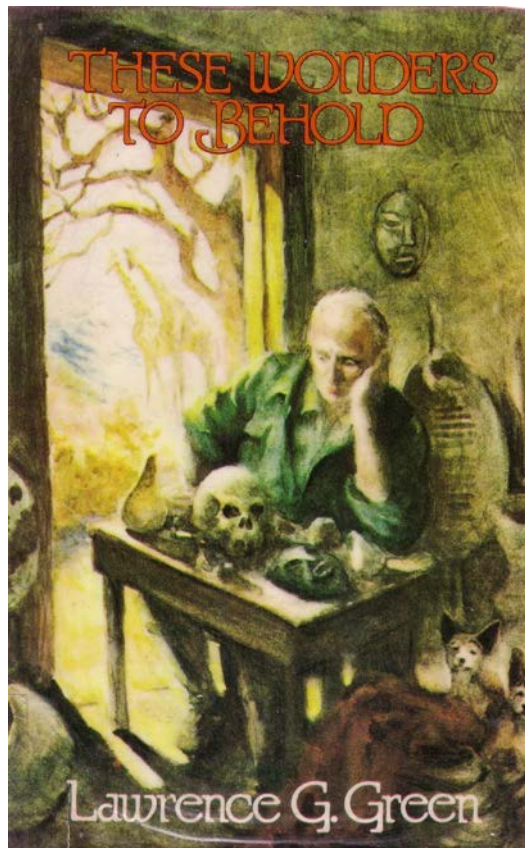


THESE WONDERS TO BEHOLD



Lawrence G. Green

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Experiences and discoveries of an author in search of the grain of truth in Africa's strangest tales; and views on certain deep mysteries of Africa, solved and unsolved or never to be solved.

LAWRENCE G. GREEN

"We carry within us the wonders we seek without us. There is all Africa and her prodigies in us." – Sir Thomas Browne

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“These Wonders To Behold” embodies a lifetime of African travel and research, and covers the Dark Continent from the Nile to the Cape. It is certainly the most remarkable book Lawrence Green had ever written.

Is the so-called “black magic” a fact? Are Natives capable of telepathy and clairvoyance? Has the rope trick ever been performed in Africa? What are the secrets of the tribal rainmaker? Are the witchdoctor’s medicines of any value? These are a few of the mysteries discussed in this book.

Lawrence Green introduces you to the “wizard of Humansdorp”, the legendary Hendrik Spoorbek. He takes you into the Kalahari and the Sahara, and mingles with the gypsies of Egypt. You meet snake-charmers and fire-walkers and giants and men who allow themselves to be buried alive.

In the end, after dealing with some baffling zoological riddles, Lawrence Green touches on the greatest mystery of all – Africa as the cradle of mankind.

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I wandered into queer corners of Cairo far from the Kasr-el-Nil and walked in a labyrinth of unpaved lanes.

I must go on foot to understand the streets of the world. Cairo's old streets, the crowded and dilapidated streets, were as alive, as romantic as they were when Haroun-el-Rashid prowled at midnight.

Very early in man's career on earth came witchcraft. Africa probably saw the origins of this grim cult, and Africa remains the witch-doctor's stronghold. Snake charming is a strange and dangerous profession.

Snake charming is a strange and dangerous profession. Nearly all the snake charmers that I knew were killed by their own snakes.

Hoosain Mia was so fond of the Cape that he called himself 'Cape Town Charlie'. He lived to seventy-five. A Cape cobra which he was training bit him in the right thumb. Treatment in hospital came to late.

Yes, the Sahara is a terrifying desert, but camels and men have been crossing it for two thousand years.

I doubt whether a lost oasis of any importance still remains to be discovered in the Sahara though the last of them was located and mapped between the two wars.

My camp near Tobruk was on the edge of a wretched patch of grain sown by Senussi. One day, before the spars crop was ready for cutting, the Senussi appeared with long knives ...

Nobody knows the Sahara, and all round the oases are secrets buried in the sand ... I wonder whether I shall ever pass over that magic frontier again.

Several of the younger men have steel skewers through their tongues, and their chests are pierced by dozens, by scores of silver hooks; and on some of the hooks small limes are hanging.

Hypnosis, religious ecstasy, supreme confidence – these states of mind will take the walker over the fire without hesitation or floundering, and that is essential.

Hindu fire-walkers in Natal will tell you that they follow a strict vegetarian diet for ten days before the fire-walking.

Pictures of basenjis, wearing jewelled collars and led by dwarfs, were found in Tutankhamen's tomb.

In many ways the giant tortoise is a significant animal. Under his monstrous shell lies a secret of evolution and it will be a scientific disaster if this vanishing race is allowed to become extinct.

Various skulls dug up in Africa and other countries have been placed in glass-cases in the British Museum and elsewhere in support of the great theory ... These skulls have caused much controversy among evolutionists themselves.

Broom was a medical practitioner until J. H. Hofmeyr made it possible for him to devote his full time to archaeology. He lived to a great age, and was regarded by his col-

leagues as the world's most distinguished comparative anatomist.

CHAPTER 1

THE GRAIN OF TRUTH

*There was the Door to which I
found no key;
There was the veil through which
I might not see.*

Omar KHAYYAM

WHEN I was a schoolboy the shape of Africa always reminded me of a question mark. Zanzibar and Lagos, Cairo and Zimbabwe were among the places I wanted to see, for even in those days I was aware of the glamour of names and an atmosphere of mystery on the map. No other continent held such charm for me, and now that I have seen the world I still place Africa first.

I know Africa better than any other land, and that helps me to appreciate those corners of Africa where I feel at

home. But no one really knows Africa. Apart from the southern end, where I live, Africa is the black man's continent, and it is impossible to fathom the black man's mind. I do not mean that the black races of Africa are profound thinkers, for millions of them are still primitive savages. Because they are savages, they are impenetrable. They are vastly ignorant – and yet they know their Africa as the white man has never known it.

Africa often seems to reveal a secret only to leave the searcher faced with a deeper mystery. If you were born in Africa, as I was, you will understand that feeling. The black races of Africa believe in magic, which I reject. I like to find reasonable answers to mysteries, knowing full well that while some mysteries can be

explained, there are others which will not be solved in my time.

Nowadays they say that Africa was the cradle of mankind. Skulls and bones are found, and scientists draw their pictures of the dawn world. How confident they are in their arguments and assertions! Yet this greatest of all mysteries is one which may well prove to be beyond human understanding.

I encountered the relics of primitive man during my early years, when my father was editor of the Kimberley newspaper and we lived outside the diamond town, at the oasis called Alexandersfontein. Everyone streamed out there by tram-car at week-ends to have tea beside the ornamental lake. De Beers, the diamond company, owned the hotel and ran it at a loss for the benefit of the people who might otherwise have gone mad in the

Kimberley dust and heat. Close to Alexandersfontein I played beside a pan where some of the stones were shaped like knives, and there were many other implements of brown and yellow jasper.

Few people thought much about such discoveries in those days. The swans on the lake and the skittle alley were more interesting. I can just remember travelling in an incredible Lanchester motor-car very early this century to a farm where prehistoric artists had pecked out rhinos and elephants on rocks worn smooth by glaciers. My only impression at the time, I think, was that I could have done a more convincing job myself in my drawing book.

Round about Kimberley a few genuine Bushmen survived, though not as hunters. Some had become so tame that

they worked on the diamond mines. As a very small boy I was shown over the mine compounds, and learnt to identify a Bushman by his wizened face and patches of peppercorn hair. Here, too, were a number of Koranas, now almost extinct as a pure Hottentot race. Tall and strong, but lazy, good-natured and fond of dancing, they drank and drummed themselves out of existence. Years afterwards I walked through the diamond compounds again, and then I realized that among the races of Africa are some of the unwritten pages in the story of mankind. Many origins have been lost. They are savages, and yet they possess faculties which civilized man might well envy.

One hears much of the mystery of the East, but I found nothing there to compare with the African enigmas. Where else but in Africa will you find a

Sphinx at one end, a Zimbabwe at the other, and a thousand mysteries of Nature and man between? I have gazed in awe upon Everest at sunrise, but it is Kilimanjaro, highest in Africa, that I long to see again; the crater of Kilimanjaro with its secrets. How little we know of mountains! Only a decade ago Mont-aux-Sources was regarded as South Africa's tallest peak. The surveyors were wrong, and two higher mountains have been found in Basutoland.

India has some wonderful conjurers, but I have watched far more skilful magicians in Egypt. If the snake charmer appeals to you, Cairo will give you greater value than ever I found in Madras and Calcutta. Lieut-Colonel R. H. Elliot, a surgeon in the Indian Medical Service, investigated many forms of magic in Africa and

India. He was a member of the Magic Circle in London, and no mean performer himself. At the end of his career he declared that he had watched many tricks which ran contrary to his preconceived ideas, but never had he seen one in which natural laws were altered at the whim of a strolling player. The most sensational shows, he added, had been given by a band of Arabs who had come from Africa. They were the men who passed rapiers through their necks from side to side in front of the backbone without injuring the blood vessels and nerves. No fake about it. Elliot had an X-ray photograph taken, and it showed the round rapier in position, just in front of the spine. These men drove sharp daggers into their skulls. "It was not magic, but I had to revise my standard of probabilities," summed up Elliot.

"Man is man, however, wherever you find him."

My dragoman in Cairo assured me that the so-called "Indian rope trick" had often been performed in Egypt, but that the men capable of producing the illusion seemed to have died out. You may remember that Pharaoh "sent and called for all the magicians of Egypt, and all the wise men thereof, and Pharaoh told them his dream". Egypt is the ancestral home of magic. Snake charmers appear in the Scriptures. Clemens the monk who lived at the foot of Mount Sinai recorded a performance of the mango trick by a sorcerer in the time of the Apostles. Ibn Batuta, the first person to describe the rope trick, was a man of Africa, a potentate from Tangier who travelled as far as China early in the fourteenth century. It was in China (not in India)

that he claimed to have watched the trick which has become an undying tale, a legend that everyone wishes to believe. Ibn Batuta's narratives are regarded by modern historians as shrewd and authentic. It is significant that Ibn Batuta gave very much the same details that are heard today; the rope uncoiling itself and rising; the boy climbing out of sight followed by the magician with a knife; parts of the boy's body falling to the ground.

"I was astonished and was seized in consequence by a palpitation at the heart," recorded Ibn Batuta. "They gave me some drink and I recovered." Batuta then heard one of the spectators saying: "By God, there was no climbing up or coming down or cutting up of limbs at all – the whole thing is just hocus-pocus." Thus the original text suggests hypnotism. This is the

explanation favoured by many investigators, while others have put forward a theory that a brazier used at some performances contained some drug.

Elliot rejected the whole story. "I see no reason to suppose that the rope trick is or ever has been seriously attempted," he stated. Elliot added that the "photographs" of the Indian rope trick, often published, merely depict a well-known acrobatic feat in which a man holds a heavy bamboo pole and a boy balances himself at the top. Look for the knots in the bamboo next time you are shown this picture.

Queen Victoria was said to have offered two thousand pounds for a performance of the rope trick. John Maskelyne, the British illusionist, raised the prize to five thousand and Lord Lonsdale doubled that figure.

Viceroy, princes and other less influential people tried in vain to discover an exponent of the rope trick. All they got was the salaaming duck (operated by a fine thread on the performer's toe) or the disappointing mango trick, that wretched piece of legerdemain made possible only by a cloth.

So the weight of evidence is against the rope trick in our day. Yet that old man of Africa, the reliable Ibn Batuta, saw a rope trick. I do not believe it was a myth, a tale he invented to embellish his narrative, for that was not the nature of the man. There must have been a kernel of truth in that piece of hocus-pocus. Ibn Batuta was made to see something, and after six centuries we are left imagining what really happened and wondering how it was done. And here I would like to stake a claim. It is

as much an African rope trick as any other.

In the official records of Tanganyika there is a clue to the origin of this most puzzling of all tricks. A district officer was approached by certain tribesmen who were in great distress because their sacred baobab tree had fallen at the command of a sorcerer. Unless it was raised, the tribe would perish.

When the district officer reached the spot he found the wise old men of the tribe seated miserably round a healthy, erect baobab tree. They were convinced that it had fallen, and nothing the district officer could say had any effect. So the officer had a word in private with the sorcerer, threatening to hang him from the tree unless he "made the tree rise". At last the sorcerer agreed. A fire was

lit, a goat was sacrificed. Uttering cries of wonder and content the old men watched the fallen tree move to its old, upright position. It was a clever piece of mass hypnotism which deceived the whole audience with the exception of the unbelieving district officer. That is on record, as I have said. A man who could perform such a feat would not have much difficulty in persuading the members of a small; credulous and selected audience that they had seen the rope trick.

I love a mystery, but I am restless if I cannot find an origin and some convincing explanation. Apparently this is not the normal outlook. Many people love an element of the miraculous, and prefer a mystery to remain a mystery. This is reasonable enough when the mystery is a work

of art such as the elusive smile of Mona Lisa. As a French artist once remarked: "When you define or explain a painting you substitute words for the real thing. As you probe, the mystery moves out of reach. Mysteries have to be respected if they are to retain their power."

Certain subjects, such as infinity and the origin of life, are too profound for the human brain, and these I am content to leave untouched. But in many ways I am inquisitive. I want to know what happened to the missing explorer, the ship that disappeared, the airman who set out across the desert and left no visible trace of his end. My favourite mysteries are those within human range, the "magic" which yields to patient investigation. I am aware that there are "more things in heaven and

earth”, but I am most reluctant to resort to the supernatural. Travelling up and down Africa I have found strong evidence in favour of extra sensory perception, telepathy, and clairvoyance among primitive natives. Doctors with long experience of tropical Africa will admit that there are natives with medical knowledge which has not yet found its way into the white man’s text books. And there are many grim examples of the evil hypnotic power of the African sorcerer, which may go so far as to cause the death of his victim.

Yet when all is said and done, hypnotism is not magic. In spite of my deep love of mystery, I am not prepared to believe that a primitive African can bring about a change in the weather. Agreed? Yet such a

penetrating and cynical observer of men and affairs as John Gunther suggested in his massive African volume that rain may have fallen in the drought-stricken Zambezi Valley in 1922 as a result of magic. “How are phenomena like these to be explained?” Gunther asked. “Purely by coincidence? Perhaps.” I say that it was pure coincidence, with no “perhaps”. I remember the episode of the rain goddess, and I shall tell the story later. There was a sequel, which Gunther missed, even more sensational than the rain that came at such dramatic moments.

But the well-travelled Gunther’s attitude is typical of that displayed by a large number of educated and intelligent people. They are reluctant to accept coincidence and will not

dismiss absolutely the idea of magic. "Purely by coincidence? Perhaps."

Often in the night I have wondered how much the heat and the dramas of the weather contribute to the mystery of Africa. I can sleep well in most places, and I live in a temperature corner of South Africa; but there have been times in my life when the heat has become a living and sickening force, a menace by day and a suffocating monster by night. Month after month of fiery sun twelve hours a day, month after month of sleepless nights cause the mental effects known as *cafard* in the French colonies. I can speak from experience of the strange moods which afflicted me during an Egyptian summer, for I suffered acutely. My imagination was far too vivid. I could not rely on my

memory, which is normally excellent, and a notebook became a necessity. Never had I known anything like that before, and I was cured immediately I returned to a healthy climate. That was one personal mystery I never solved. You may find mystery in regions of ice, but the heat of Africa seems to heighten the drama and makes the mystery pulse and glow.

Once a drought killed half a million natives in the southern Congo territories. Never in living memory or tribal legend had such years of relentless heat descended on the land. By the summer of 1890 the great drought had reached its zenith, and a British elephant hunter named Harold Martin was passing through the famine areas and searching frantically for water. Martin had to bury three tons of ivory as the native carriers refused to

leave their villages. The very air was tainted for miles with the smell of game carcasses. Vultures wheeled in vast flocks, dense as thunder-clouds. Martin and his carriers had used almost the last water calabash when they halted where the vultures had gathered, on the edge of a former lake.

It was a sun-baked hollow now, with the last of the moisture in the centre. Barbel weighing eighty pounds were dying painfully in green slime, preyed upon by hundreds of crocodiles which had almost eaten their fill. All round were dead antelope. Trees had been uprooted by elephants dying of thirst. Martin shot a cow elephant which had become a living skeleton. It was an Africa he had never seen before. He lived to tell the tale only because one of his carriers, a Zulu, suddenly fell on his knees in a dry river bed and cried out:

“I see water.” The Zulu dug and found water, gallons of fresh water to fill the empty calabashes. Just a coincidence? I think that Zulu did indeed see water through the sand that shimmered in the heat. But it was the power of observation and instinct of a savage brought up in the wilds that enabled him to “see” the water. Some little sign that the Zulu himself might have been unable to describe. Possibly the scent of water. Certainly not magic.

It was in London between the wars that I met old Martin the hunter, and the distance from Piccadilly to Portuguese East Africa only seemed to stimulate his memories. He had followed the ivory trail in British, Belgian and Portuguese territories for several decades, and he told many tales which would have sounded uncanny to

anyone who had never studied a native tracker in the African bush.

Martin always looked for a reasonable explanation. He believed that the experienced African tracker was incapable of losing himself. Such men, he said, not only remembered landmarks, but could often visualize ground ahead where they had never set foot before.¹ Instinctively they avoided the swamps and difficult places. They used imagination to a remarkable degree.

¹ Dr. Martin Holdgate, an English scientist who has taken part in surveying unmapped territory, wrote: "Some people have a flair for routefinding which others lack ... I do not think that this awareness comes from instinct in the para-normal sense of that word, but from a subconscious reaction based on an experience of similar situations."

One of Martin's spoor-boys could follow elephant across a wide expanse of hard rock. This feat was due to superior eye-sight, for Martin was unable to discern the footprints until the tracker had sprinkled the rock surface with wood ash from the camp-fire, rather like a finger-print expert at work with his powder. This tracker baffled Martin one day by stopping suddenly and remarking: "Bwana, it is no use going on – this elephant has no tusks." Martin refused to believe it, and they went on. After an exhausting trek they came within sight of the elephant – a tusk less old bull.

Some hunters would have failed to secure a proper explanation, and thus another African mystery might have entered the realm of magic. Martin's tracker, however, was persuaded to give the secret away. The elephant had

rubbed its head against a tree, and had left no tusk mark. However, the tracker had not mentioned this clue because it might have been an elephant with one tusk. Later on the elephant had passed a mahogany tree, and had rubbed the other side of its head against the bark. Again no scratches from the tusk.

The same tracker once followed a party of ivory thieves to a shallow river where they had taken to the water to avoid pursuit. Even this problem was solved by the tracker. He followed the thieves upstream, noted the exact point where they had left the water, and brought Martin rapidly to the stolen ivory. It was the tracker's greatest feat, yet the explanation was simple. The thieves had turned over many pebbles against the current as they had marched up the river bed. No magic you see – only observation of a high order.

Because I have often expressed my liking for mysteries, people send their mysteries to me or bring them to my door. One great class of mystery which is obviously much to the public taste is the missing person, varied occasionally by the person supposed to be dead, but in reality still alive. Africa has had its Colonel Fawcetts, men who have gone in search of treasure or lost cities, human beings or animals unknown to science. They have set out and vanished without trace. Each year the glamour of the unsolved mystery grows. They are dead, but a romantic public prefers to believe the rumours of their survival.

Ever since the night in 1918 when the last Tsar of Russia and his family were murdered by the Bolsheviks at Ekaterinburg there have been rumours of the survival of one or other of the

children. Some accounts state that the Princess Anastasia escaped. In a village not far from Cape Town dwells a man who is believed by some of his friends to be the Tsarevitch, the son in the line of succession to the throne. According to the local story, his old nurse brought him out of Russia and wrote down the full story in Russian before she died. This interesting narrative (with a box containing some of the Russian crown jewels) is said to have been placed in the safe of a bank somewhere. The man speaks English and Afrikaans, but no Russian. Certain marks on his legs are supposed to correspond with the leg irons worn by the Tsarevitch to correct a deformity. A photograph of the Tsarevitch inspecting Russian troops is regarded as another piece of evidence because of a real or fancied resemblance. The man is said to

remember fragments of his early life in Russia, including the medical treatment he received at the hands of Rasputin, the rascally monk.

I was asked to “make a book of it”, and indeed I would have done so gladly had I believed the tale. But first I demanded to see the nurse’s story and the “Crown jewels” in the bank. That was the last I heard of the matter. No doubt there is something unusual in that man’s past, but I do not think the Tsarevitch will turn up in a South African village.

Africa gives sanctuary to many mysterious characters who wish to leave their pasts over the horizon. It also provides a living for a legion of adventurers who are probably more at home on the veld and in the forests and deserts than anywhere else on the face of the earth. “I could tolerate England no more; I would go and die as I had

lived, among the wild game and the savages,” declared Allan Quartermain. Men in real life still follow the example of Rider Haggard’s fictitious hero.

One such man who found what he sought in Africa – and his quests were as strange as any – was Colonel W. J. A. Grant of Devon. His home was filled with stuffed polar bears and walrus heads. You will find his name on the Arctic maps. But the weirdest object in his possession was a mummified hawk which he had collected in Egypt towards the end of last century. This bird was said to drip blood when war was imminent, and Grant assured me that a dark liquid exuded from the breast shortly before the outbreak of the South African War, and again in August, 1914. Grant was no believer in magic, however, and he added that the moisture was probably due to the

temperature acting on the substances used by the Egyptians to mummify the bird.

Grant’s strangest expedition, I think, was undertaken towards the end of last century at the request of a French countess. Her ne’er-do-well son had landed in Cape Town and then disappeared. Sometime later there had been a vague report of his death in Rhodesia. Grant was asked to discover the facts and bring the body home if the report was true. He was allowed liberal expenses.

After weeks of patient investigation Grant learned that the young Frenchman had joined the British South Africa Police and had been posted to Gwelo. He had died at a camp fifteen miles from Gwelo, and had been buried near there. At last Grant located a grave in the bush and opened it, wondering

whether it would be possible to identify the body.

It was possible. The Frenchman had died of “Rhodesia fever”, with enough alcohol in the system to act as an embalming agent. Grant placed the body in a new lead coffin and returned to Gwelo. The stage-coach company refused to transport it to the railway at Bulawayo, and Grant was unable to hire an ox-wagon owing to the rinderpest epidemic. Always resourceful, Grant bought a team of goats and made a cart with four bicycle wheels. When he reached Bulawayo he disguised the coffin by packing it in a large case stamped “mining machinery”. Grant felt that his mission was complete when he saw the coffin placed in the family vault in France. But that was not the end of the story, for early in World War I a German

bomb scored a direct hit on the vault. Grant regarded it as a grim sequel to the effort he had made in solving a mystery of Africa and gratifying a mother’s whim.

Africa has given up many secrets. No longer is the source of the Nile a mystery. Great lakes and the Mountains of the Moon have been mapped. Yet strange tales still come from the equatorial forests, the deserts cover and uncover the relics of old dramas, and the wind-blown sand carries many a queer sound if you know how to listen with your ear close to the taut skin of an African drum.

You are often close to Africa on the great rivers. I find this mode of travel agreeable, for you have the panorama of a railway journey without the unpleasant jerking of a train; and when the river boat stops there is time to

inspect many a queer little waterfront and its people.

So I remember the stern-wheelers that carried me through the dark heart of Africa. White passengers live on the upper-deck. The saloon is in the open-air, tables are set round the funnel, and at night the funnel glows a dull red in the darkness. Day after day the steamer plods along on her drunken, zig-zag course as the helmsman dodges sandbanks and shallows. Now I recall every odour and sound. The wood smoke and the smell of sand. Hippo and crocodiles and dugout canoes. Velvet-black bodies wading with nets or standing with shields and spears. Distant drums, the inescapable "bush telegraph" that runs across Africa from Zanzibar to Boma. Crackle of red fires in the darkness and the thumping of the steamer's

engines. Bamboo palisades, vultures on a tree and native girls beneath the tree pounding grain. A long panorama of the old Africa. And always the open-air saloon, where I listened to the gossip of the river and the tales of lands still half-explored and half-unknown.

Those old sun-helmeted travellers on the Congo packets talked a lot about African animals, and it was well-informed talk. Some of it might have sounded like heresy to the zoologists, especially the sceptic who enjoys scoffing at the animal legends of Africa. However, a land which produced several large mammals new to science early this century may still be hiding a few surprises in its forests and swamps. Winwood Reade explained some of the old mysteries a century ago when he wrote: "The men with dogs' heads, of whom Herodotus

speaks, are the barking baboons. The mermaids of the Arab tales are the sea-cows of the African rivers which have feminine dugs and a face almost human in expression. The huge serpent which opposed the army of Regulus is now well known as the python.” I like to see mysteries solved in that way, but Winwood Reade was only standing on the edge of a vast territory which has not been fully explored yet.

Some mysteries stand up to investigation, others do not. When I was a small boy my parents gave me a fascinating work called “Popular Fallacies Explained and Corrected”. Thus I was able to avoid certain of the more foolish and dangerous beliefs. I learnt that a person falling from a great height is not dead before he reaches the bottom; that it is unsafe to trust a mushroom merely because it peels

easily; and that wheat found in the tombs of Egypt will not germinate. The same work proved that the troops on board the *Birkenhead* did not go to their deaths standing to attention. Half a century after studying that book I am still looking for proof of the strange narratives that come my way.

I have solved certain mysteries to my own satisfaction. When the people who might have told the truth are dead and gone then one can only form a theory. I liked the tale I heard of pioneer days in Northern Rhodesia, when a railway coach was stolen for the sake of the whisky in the guard’s van. How do you steal a coach? By laying your own branch line into the unmapped bush, perhaps, and pulling it up afterwards. But the men who planned that robbery will not come to my door to fill in the missing details.

Off the coast of West Africa there is a cocoa island where you might spend the rest of your life without seeing a single face you had known in the past. An Englishman who never forgot a face stepped on shore there; and in a shop he recognized an Englishwoman who had been wanted in London on a charge of poisoning her husband. False or true? It is another lost trail, and I shall never know.

Africa is the land of lost trails, lost people, lost cities, lost treasures, lost aircraft; and along parts of the coast-line you may see the lost ships. Treasure legends survive for a long time, and in Africa they have a way of coming to life. All through the great deserts of North Africa you hear of treasure in the dunes, and so much has been found that one cannot doubt the presence of further, undiscovered

wealth. In Egypt I listened to many such tales, told by men who had themselves excavated tombs and stocked the museums.

Once an Arab came in from the Libyan desert with a piece of metal under his *djellaba*. A merchant in the Cairo bazaar made an offer which the delighted Arab accepted. "If you have any more rough brass I will give you a piastre over the market price," declared the merchant when they parted. So the Arab came again and again; and piece by piece the broken metal was weighed and sold. In the end, when the Arab had departed for the last time, the merchant was able to fit together the life-size statue of a man; a statue of gold, unearthed by the simple Arab among the Roman ruins in the desert. That treasure found its



I must go on foot to understand the streets of the world. Cairo's old streets, the crowded and dilapidated streets, were as alive, as romantic as they were when Haroun-el-Rashid prowled at midnight.

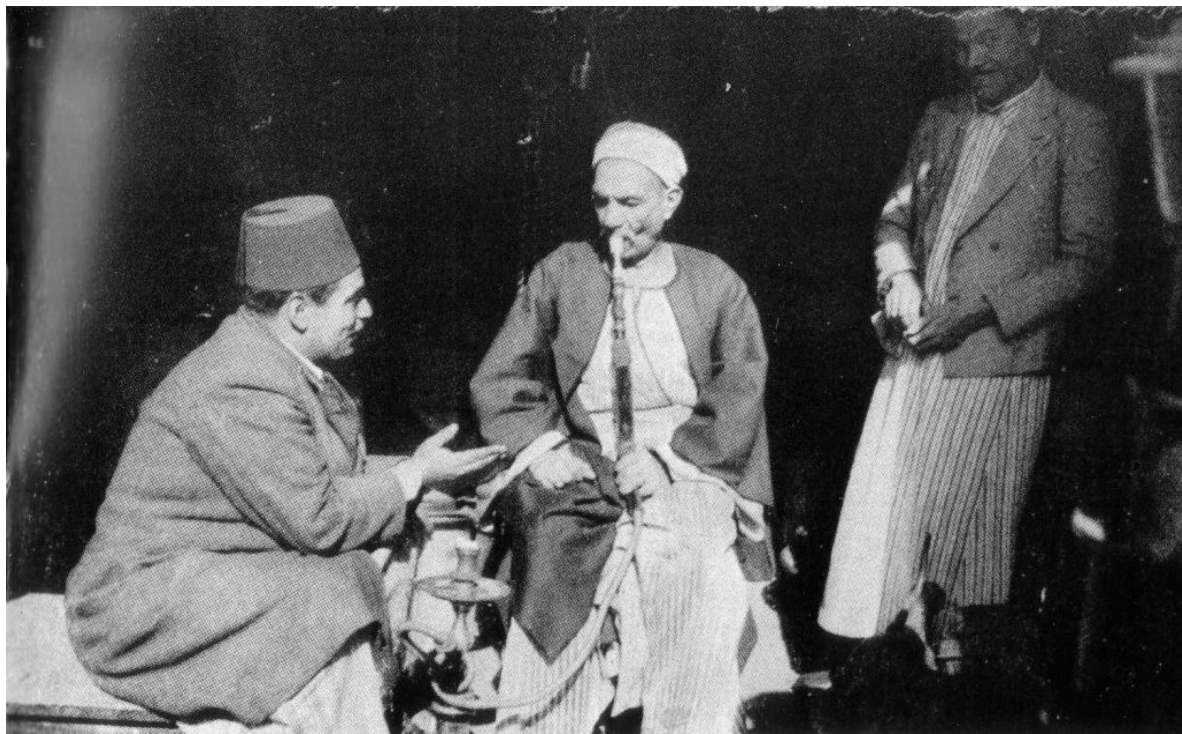
way to a Cairo museum, but many did not.

Cairo and Cape Town are the two cities of Africa which I know well; the second, let me say, far better than the first. But in Cairo I had a friend I called Sharazad; not an entirely trustworthy person, but shrewd and entertaining and a brilliant conversationalist. With her I wandered into queer corners of Cairo far from the Kasr-el-Nil and walked in a labyrinth of unpaved lanes. Streets have always gripped me, and I must go on foot to understand the streets of the world. Cairo's old streets, the crowded and dilapidated streets, were as alive, as romantic as they were when Haroun-el-Rashid prowled at midnight and the real Sharazad told her thousand tales.

Thus I tried to absorb the wisdom of Egypt. I studied Islam in Africa on the

fringe of Al Azhar, the droning old Moslem university where the centuries fall away and ancient Cairo lives again. I could have filled myself with free coffee in the Street of the Gold Workers, among the goblets and perfume-burners and the dishes inlaid with silver and gold. I listened to the rug-makers singing as they toiled, and studied all the trades in the recesses of the Mousky ... and all the people.

There I met the healer and easer of pain, Sheikh Ibrahim. Often I had seen him roving the streets with his cry of *Inshalet al Hamalat ya Metwalli*, invoking the Moslem saint to remove the sorrows of illness. He had a little hole-in-the-wall consulting room where he treated his patients. His firm stare and soothing voice formed the sheikh's two main secrets, and I could almost translate the well-chosen stream of



I wandered into queer corners of Cairo far from the Kasr-el-Nil and walked in a labyrinth of unpaved lanes.

Arabic. "Your eyes are tired ... they are closing ... you are at rest ... the headache is vanishing ... the pain will not return."

Sometimes I went with Sharazad to a cafe in the Al Azhar quarter where one dined in the aroma of stewed lamb, cooked in the Egyptian way with peaches. They served the best of everything, the finest mangoes grown by the Pashas, the sweetest white grapes, dates from Siwa oasis, luscious watermelon, egg-plant stuffed with rice and grilled *kebabs* on skewers. I wished that I might know Egypt as I came to know its cuisine.

An acquaintance in the police took me through the Wagh-el-Birka, the great red light district so close to Shepherd's and so much less romantic. I looked into brothels jangling with automatic pianos and the harsh laughter

of the women; into cafes used by white slavers and drug peddlers; and I passed the scenes of many a murder. Egypt is a land of violent crime, and my police friend talked of the assassinations of high officials at the time of the terror, when Cairo blazed with orange posters offering rewards up to ten thousand pounds for the unknown gunmen. He told of blackmailers and counterfeiters, smugglers and wicked dragomans, and of crime mysteries solved and unsolved.

It is difficult to live for long in Egypt without forming a lasting distrust of the Egyptian character. Between the wars, when the boom in dangerous narcotic drugs was at its height, the fingerprint records from police headquarters were sold to a number of the leading drug traffickers themselves so that they were able to pose in court as first offenders.

That is Egypt. You learn the hard facts of life there. Not many people are to be trusted.

Queer people indeed, some of them, with strange occupations. One village called Birma is the home of a people with hereditary skill in the art of hatching chickens. I believe their methods go back to the days of the Pharaohs, and no man of the village has ever given away their secrets. In the season they spread out all over Egypt, building the little mud huts which they use as incubators. Each hut is warmed by a fire and filled with thousands of eggs. The hatcher shuts himself up in this den and he is said to test the temperature of each egg by placing it against his eyelid. The fires are allowed to go out at last, and the man of Birma emerges with thousands of chickens. No modern incubator operated by

electricity yields better results than those secured by the Birma egg-hatchers, using the secret methods of a thousand, two thousand years ago.

I came to know something of the deserts and the cities of Egypt. Every morning when I woke in Cairo the hotel building shook a little as the first tram-car went grinding into the Opera Square with the driver braking at the corner. Will I ever wake there again? I doubt it, for I do not often go back on my tracks.

Mystery takes strange shapes in Africa, and you never know when and where you will encounter it. I have accompanied many expeditions in my time. Though we seldom found what we sought; there was always some recompense for the hardships and the effort and the incidental dangers. Africa does give you plenty to think about.

CHAPTER 2

WITCHDOCTOR'S STRONGHOLD

VERY EARLY in man's career on earth came witchcraft. Africa probably saw the origins of this grim cult, and Africa remains the witchdoctor's stronghold. Devils and werewolves, charms and spells of medieval Europe, the superstitions and the "evil eye" that remain in everyday life, came out of the Dark Continent thousands of years ago. Witchcraft has never lost its grip on the African native. Wherever you go, from Algiers to Cape Town and from Dakar to Zanzibar, you will find black millions who are still ruled by the fear of *djinns* and demons, sorcerers and wizards, *ngogwe* and *tokoloshe*. In many tribes a death is nearly always regarded as the result of magic performed by an enemy. Millions believe that a mother can

bring only one soul into the world at a time. Thus twins represent a split soul; they are bewitched, and a demon will find its way into each of them, for each has "a place without a soul". The killing of twins in Africa was once the universal custom. No one would dare to say that it has ceased.

Black magic dominates every phase of life up and down Africa, and few Africans (whatever degree of education they may reach) lose their belief in it. How can it be otherwise when so many civilized people in Western Europe retain strange beliefs without the slightest foundation? Africa today reveals all too vividly the mental processes of our ancestors at the time when thousands of people accused of witchcraft in England and in Western Europe were hanged or burnt at the stake.



Very early in man's career on earth came witchcraft. Africa probably saw the origins of this grim cult, and Africa remains the witchdoctor's stronghold.

Africans move in a spirit world. By day and by night they are watched by jealous spirits; and the African who breaks the traditions of his tribe is punished immediately by this horde of angry ghosts. That sums up the great religion of Africa, one religion which millions have in common whether they are registered as Christians or Moslems or pagans. Converts use their new religions to ward off witchcraft, and so you find verses from the Koran used as charms. Christian missionaries compose special prayers and services for those who believe themselves to have been bewitched.

Experienced white people who have spent their lives close to witchcraft in tropical Africa often remark: "There is something more in witchcraft than meets the eye." In other words, they confess to a sort of grudging belief in

black magic. If they investigated each mysterious happening in a scientific way, a great deal of cruelty would be revealed but the magic would vanish. I remember one West African potentate who was described by a shrewd white official as a person "with the heart of a leopard and the morals of a crocodile". That is witchcraft. It goes, all the way back to a primitive and merciless world.

Now and again you will encounter something inexplicable in African witchcraft, some event which does not yield easily to the means of research available in remote places. Ordinary doctors are called upon to solve problems which call for the combined skill of a team of Spilsburys and Freuds. Such failures are eagerly discussed, and the occult explanation is accepted by a small body of white

exiles simply because they have been unable to discover the truth. These are the weird tales that drift back to Europe with embellishments, good tales to tell before admiring and wondering audiences of people who have never known the African bush.

Primitive races certainly have methods of murder and suicide which have not yet been worked out in detail by white science. Among the Australian aborigines there is the "pointing bone" mystery. Long ago, perhaps, these people discovered that a person might die after a mere scratch with a bone. They knew nothing of germ infection, of course, and so their sorcerers decided that it might be possible to remove unwanted people by pointing a bone at them. And such is the power of hypnotism that the "pointing bone" achieved its purpose. Where people

expect such things to happen, the task of the hypnotist is easy.

It is a technique which the white hypnotist has not mastered. African wizards understand it very well indeed, and that is my explanation of certain mysterious deaths where poisoning can be ruled out and the post-mortem fails to reveal the cause.

One such death was recorded by Sir H. R. Palmer, acting lieutenant-governor of the Benue region of Nigeria. He was touring Benue in 1921 when he heard that a young Jukun native, claimant to a chieftainship, was for that reason in danger of his life. Palmer engaged the young man as his personal servant. Two years later Palmer was stationed at Maiduguri in the north. This servant informed him that he had heard that his mother was ill, and

he wished to go home to Ibi in Benue.

Palmer remembered the rivals to the chieftainship and sent a telegram to the official at Ibi asking him to report on the situation. The official replied that the mother was well but that the chief was ill. Palmer refused his servant's request. One month later, however, the servant insisted on going to Ibi, and said good-bye to his master. Palmer noted that the young man was perfectly well and normal. Thirty minutes later the servant had a fit and died.

Palmer was certain that some form of witchcraft had been used, and he instructed Dr. W. E. S. Digby, the government medical officer, to carry out a post-mortem. This was done, but no trace of poison or other cause of death could be found. Palmer

could only surmise that the young man had died of fear, induced by hypnosis.

Witchcraft flourishes in parts of Africa which have long been under civilized influence, just as it does in Nigeria and other territories where the *Pax Britannica* replaced savagery almost within living memory. Listen to the cruel tale of Elifasi Msomi, the axe-killer of Natal.

Elifasi began wandering from kraal to kraal in Natal in 1954, asking for food and receiving it. He was a small, light-brown man with a peculiar walk which made it easy to identify him. Wherever he went, Elifasi selected men, women and children at random and killed them with his axe. Living in trackless bush, he escaped a special force of detectives again and again. Fifteen

known victims had been counted when Elifasi was caught. This reign of terror had lasted for nearly a year mainly because the natives regarded Elifasi as a wizard and had been afraid to tell the police all they knew of his movements.

Elifasi, at his trial, explained that he had once been a successful witch-doctor. Something had gone wrong with his work, so he had consulted a more successful practitioner. "Go out and collect human blood – you need blood to make your medicines powerful," advised the consultant. And this man gave Elifasi a *tokoloshe* as companion; an invisible gnome who would march beside him and protect him from all harm.

So they went on their way, Elifasi the innocent one and the *tokoloshe* who whispered all sorts of evil things

in his ear. Elifasi admitted that he had lured people away from their kraals, but the *tokoloshe* had murdered them.

The trial lasted fifteen days, and Elifasi was found guilty. Before sentencing him to death, the judge said that Elifasi was a cold-blooded and savage man. "The *tokoloshe* was a figment of Elifasi's imagination, but it is beyond doubt that he had other motives apart from sadism," declared the judge.

Other unknown motives which no white man could guess. The natives of Natal, however, accepted the fantastic story of the *tokoloshe* as fact. They were afraid that the killings would go on, because it would be impossible to execute such a wizard as Elifasi. The *tokoloshe* would have him out of prison soon

enough, and then that sinister axe would strike the people down again.

So serious was the unrest that the Minister of Justice sent six Zulu chiefs to Pretoria. They were taken to see Elifasi in the condemned cell, and they identified his body after the execution. Only in that way would the people of the kraals believe that Elifasi was dead, that the *tokoloshe* had not saved him.

Twelve hours after the execution, lightning struck the hut in the Impendhle district of Natal where Elifasi had lived for many years before he started his wanderings. For months the land had been drought-stricken. With the lightning came rain. The people of the kraals said that if only Elifasi had been caught earlier there would have been no drought.

Trial by ordeal is an everyday affair in many parts of Africa, and here again the witchdoctors who discover the witches and wizards are credited with supernatural powers. Indeed the witchdoctors sometimes put on such a dramatic show that even experienced colonial officials are deceived. A party of British hunters were in the wildest part of Uganda a few years before World War II when one of their native bearers was stabbed to death. They were far from a police station and their own investigations failed. Grey, the leader, then reluctantly allowed the village chief to call in a witchdoctor.

All the men of the village lined up and the witchdoctor ordered them to enter the hut where the body of the murdered bearer was lying. They were to go in one by one and touch the body. "When the guilty man touches the body, the

dead man will come to life and denounce him," declared the witchdoctor.

Everyone watched in dead silence. At the end it looked as though the witchdoctor had involved the white men in a stupid hoax. However, the witchdoctor gazed at the men of the village carefully, then pointed to one and shouted an accusation. The man started to run, but was soon captured. Before long he confessed.

Grey took the witchdoctor aside and asked him how he had known. At first the witchdoctor tried to keep up the illusion of magic, but Grey persisted and the truth came out. The witchdoctor had covered the dead man with a substance which became white as it dried. He knew that only the men with clear consciences would touch the

body. The one man without a white mark on his hand was the murderer.

Such a well-known authority on African affairs as J. H. Driberg was completely baffled by a trial by ordeal which he saw among the Kakwa people of the Nile years ago. Eight murder suspects squatted in a circle, each one with a stone in front of him. In the centre was a peg with a pullet attached to it.

The witchdoctor sprinkled the pullet with water, mumbled an incantation and ordered the bird to find the murderer. Then he cut off the pullet's head swiftly. The pullet fluttered round the circle and fell on one of the stones. Very soon it became apparent that the bird had indicated the guilty man. Driberg persuaded the witchdoctor to repeat the performance ten times, and the result was always the same. "Doubt

was stilled," recorded Driberg. It must have been a trick, but he never discovered how the trick was done.

Now and again the witchdoctor appears in the guise of a Christian missionary, and then the resulting confusion may turn into utter disaster. Primitive natives often become dangerous when in the grip of religious hysteria. Such episodes have ended in bloodshed.

Nigeria saw a number of tragic incidents during World War I, when self-appointed prophets arose in the Calabar province. At first they seemed to be genuine, for they preached abstinence and purity. Sales of fiery trade gin fell from thousands of cases to almost nothing; such was the influence these men gained over the masses. Pagan idols were burnt, shrines were desecrated. Later on, however, columns of people marched about the

country singing hymns. As the fervour mounted, a number of murders were committed, and finally the troops were called out and several “converts” were hanged.

Another outburst of religious mania occurred in 1929, when a large body of native women advanced on the troops with cudgels. They believed that bullets would not harm them, and warning shots failed to stop the excited women. Even when machine-guns were brought up they did not run, but retreated slowly waving their sticks. Such demonstrations reveal the evil power that an African priest of witchcraft may secure.

Tom Nyirenda, known as Mwana Lesa (“Son of God”), an educated native from Nyasaland, was the evil genius in a long series of murders carried out under the cloak of religion. He

appeared in Northern Rhodesia in 1925 and there he acquired and studied a copy of John Foxe’s “Book of Martyrs”. This sixteenth century religious work was illustrated with pictures of witches being drowned, tortured and burnt at the stake. It put an idea into Nyirenda’s head.

Nyirenda went through the colony preaching “Africa for the Africans” and telling the natives to drive out the white people. Among those he met was a headman named Chiwala, who was plotting to become King of the Lala people. The throne was filled by means of a ballot, an unusual method in African territories. Nyirenda produced his “Book of Martyrs” and claimed to be a magician who could place Chiwala on the throne. Chiwala agreed to a plan which Nyirenda put before him.

A meeting was called beside a river. Nyirenda, dressed in long white robes, informed the gathering that God had sent him to separate the sheep from the goats. He pretended to baptize every man, woman and child in the tribe. Sometimes the headman Chiwala made a sign, and then the person who was being baptized was held down and did not re-appear above the surface of the swift river. "Be still, he will come up later – he is communing with the spirits below," declared Nyirenda. In this way more than fifty people who might have opposed Chiwala were drowned and carried down the river.

Nyirenda then decided that it might be safer in the Belgian Congo. He crossed the frontier with a band of "converts" armed with muzzle-loaders and singing "Onward Christian Soldiers". These followers were convinced that no white

man's bullets could harm them. Nyirenda built a stockaded village near the border station of Sakania. There he satisfied his blood-lust week after week, so that many killings went unrecorded. At last the police heard of these murders, and Nyirenda fled across the border again into Northern Rhodesia. When the Belgian authorities searched Nyirenda's village they found many bodies, and it was estimated that he had been responsible for a total of more than one hundred and seventy deaths.

So the Belgians complained to the district commissioner at Serenje in Northern Rhodesia, and the search for Nyirenda was on. It was difficult, because many feared the bloodthirsty "priest"; but native police arrested Nyirenda at last and tied him to a pole. They were afraid he would escape and

fastened the bark rope so that it cut into his flesh and stopped the circulation of the blood. Doctors at Broken Hill had to amputate both arms.

Nyirenda was tried for murder at Broken Hill with the headman Chiwala and several others, and they were sentenced to death. The final scene took place in public, for Nyirenda's exploits had thrown the country into turmoil and the government wished the chiefs and the people to see justice done. A scaffold was built in the square outside the prison. The condemned men came out, their arms pinioned – all except Nyirenda, who had no arms. An old Roman Catholic priest with white beard and crucifix led the procession.

It was over very soon, but for many years after that grim episode there were natives in Northern Rhodesia and the Congo who held the name of Nyirenda

sacred and expected him to return and lead them again. That was one more page in the dark story of witchcraft, the black magic that dominates many events in Africa and casts its evil shadow over the lives of millions from the cradle to the grave.

Millions of African natives believe it is possible to influence the weather, and especially the rainfall, by means of secret rites. The rain god demands sacrifices. In the last resort this means a human sacrifice. Yes, the old, cruel Africa still lingers, though such ceremonies are kept among the darkest secrets.

Rainmakers flourish in a land where rain is the life blood and drought brings hunger and even death. No doubt many ruling chiefs are descended from the rainmakers of centuries ago. Each tribal

rainmaker has his own methods. He may or may not have confidence in his mumbo-jumbo, but one thing is certain: he is a shrewd judge of the weather, and nothing will persuade him to use his magic save at a time when the ants are on the move and the frogs are croaking, or other signs are favourable.

John Gunther, you will remember, mentioned a witchcraft trial in Southern Rhodesia in which a native, who was supposed to have seduced a tribal “rain goddess”, was burnt alive. Then the rains came. “Purely by coincidence? Perhaps.” That is a story which I have checked, not only from the official report and the judge’s comments, but from police and other sources. It had a weird sequel, apart from the rain which I regard as natural.

White people in the Rhodesia’s were deeply shocked when they heard of this

human sacrifice, for it was in 1922 and they regarded the country as civilized from end to end. But up in the north, near the Portuguese East African border, there was a remote district, the land of the Mtuwara, an isolated Bantu people who clung to barbarism. Mount Darwin was the police camp in this far corner. The corporal in charge was completely unaware of the grim ritual which took place only a few miles away, in the Mavuradonna mountains. And not until the dry summer of 1922 did the police find out at last.

That was the most serious drought since the great famine which had occurred before the Pioneer Column entered the country in 1890. All the preliminary sacrifices had been offered – the beer strewn on the ground by men with shaven heads, cattle with dark spots slaughtered, the traditional blue

cloth offered – but no rain clouds appeared.

Mtuwara tribesmen worship an ancestral spirit called Mwari, who has a wife on earth. This human “rain goddess” is always a young girl, a virgin, and she intercedes with her husband when rain is needed. She may be deposed or replaced. At this period she was a slip of a girl named Necheskwa, meaning “She who has power to make rain”.

Necheskwa lived in a sacred grove called Miti mchena, the “place of the white trees”. She was attended by women who tilled the land and prepared her food; and the only man allowed within the circle of trees was her guardian Chigango, priest and a headman of the Mtuwari tribe. Someone suggested that Necheskwa had been seduced. The rain god was angry and there would be no rain until the

seducer had been found and sacrificed. Chigango had no objection to human sacrifices. It came out later that on three previous occasions he had been responsible for three men going to the stake to be burnt alive. But this time everyone agreed that Chigango’s own son Manduza was the guilty man.

Chigango could not break the tradition to save his son. He secured the approval of the paramount chief Chiswiti, organized a “hondo” of seventy spearmen, and appointed a headman named Chiriseri to make the arrest. Chigango played no further part, for he was not expected to set a light to his own son’s funeral pyre.

Early one morning Manduza was summoned from his hut. He must have suspected the purpose of the “hondo”, for he set fire to his hut and tried to escape amid the flames and smoke.

His wife did escape, but Manduza was caught and bound. They carried him, tied to a pole, for some way. Towards the end of the journey he was allowed to walk, and four men accompanied him to the place known as Nyama Kungwa – “meat for the crows”. There one of his guards held him while the other three built up the pile of firewood. Manduza was again lashed with bark rope to the pole and laid on the pyre. Dry grass was added. Tradition demanded that the fire should be made in the ancient way, with a friction drill. This was done, and the four men departed with Manduza’s shouts of agony sounding in their ears. Heavy rain fell that night, confirming every member of the tribe in the belief that the right thing had been done.

A trooper of the British South Africa Police rode past the place of sacrifice a few days later and noticed a charred human skull, ribs and bones and wood ash. Inquiries brought Manduza’s wife to the police camp. Seven men were arrested, and after a preliminary examination at Mount Darwin they were tried in Salisbury before the chief justice, Sir Clarkson Tredgold, and jury. The accused were the paramount chief Chiswiti, the priest Chigango, the headman Chiriseri and the four men who had carried out the burning.

It was clear to everyone in court that the accused could not understand why they were being tried. A guilty man, they thought, had been sacrificed, rain had fallen immediately as they had expected, and not one of them was conscious of any feeling of having

committed a particularly brutal murder.

Defence evidence showed that these natives had an illustrated Bible, printed in Mashona, which included a picture of Abraham preparing to sacrifice his son Isaac. Thus their only knowledge of the white man's religion appeared to support such acts of sacrifice as they had carried out.

Sir Clarkson Tredgold asked an authority of native custom, who gave evidence, whether there was any systematic teaching of common law (the white man's law) to these natives. "No, not systematic," was the reply. "They learn our laws chiefly when they break them," commented Sir Clarkson Tredgold.

One native witness declared: "When a man seduces the rain goddess he must be burnt alive. It is the only way of getting rain, and it has been going on for ages." Another native witness pointed out that the paramount chief had given the order and they dared not disobey the chief. When Chigango was asked by the judge whether he had anything to say, he replied: "I was simply following the custom of the tribe."

Counsel for the defence asked that the accused should be regarded as "guilty but insane", in view of the fact that they suffered from immaturity of reasoning.

At four o'clock on the afternoon of Wednesday, May 23, 1923 the jury retired to consider their verdict. Meanwhile a few white people living in the Mount Darwin district had

gathered at the police station to hear the verdict when it came through from Salisbury, one hundred and fifty miles away, by telephone. Corporal Trent, sitting at his desk, then recorded the strangest interview ever to reach the records of the force. Kusekwenya, son of Chigango, came in, a fine six-foot savage. He laid down his spears and saluted. "Mambo!"

Corporal Trent asked him what had brought him there. "I wish to know what has happened to my father and the other man," announced Kusekwenya.

"No one knows," Trent explained. "The verdict will come by telephone, and we are all waiting." It was ten minutes past four as he spoke.

"I can tell you," remarked Kusekwenya with a slight smile. "They will not hang my father, nor will they hang any of the men. My spirit tells me. One, will return to his kraal within seven days. My father will return before the next rain falls."

Then the telephone rang. Corporal Trent's face changed as he listened, and on Kusekwenya's face there was a look of triumph.

"Chisiwiti has been acquitted," Trent repeated. "All the others have been sentenced to death – but there was a strong recommendation to mercy and the judge made it clear to them that the death sentences would be commuted." Summer came again to the land of the Mtuwaras. October brought dust, November was so hot that the white people could not sleep. December was dry, and the police reminded the

Mtuwaras that human sacrifices would not be tolerated. Some days before Christmas the police were informed that old Chigango had been released because of ill-health and was on his way home. They gave him a hut at the Mount Darwin police camp one night; then bearers arrived and carried him on a litter to his own kraal. That night came the thunder, and the distant lightning, and finally the huge rain-drops. For thirty-six hours the baked and steaming earth was flooded with rain. The crops were saved. Three days after arrival Chigango died. All this is from the records of the British South Africa Police. Those who believe in thought reading will find comfort in this queer story from the remote African bush; for the jury gave their verdict just as Kusekwenya entered the Mount Darwin police

station. Kusekwenya's prophecy was baffling, unless you put it down to coincidence. The rain was pure coincidence, in spite of John Gunther's faith in witchcraft.

One final point from the private notebook of the late Sir Clarkson Tredgold is of interest. The learned judge did not believe the story that Necheskwa the "rain goddess" had been seduced. It was a piece of religious fiction necessitated by the desire to find a victim for sacrifice. Manduza, who met his death in the flames, was an innocent man.

Last of the great "rain queens" in the Transvaal was Mujaji, that withered and famous old woman who was known to Rider Haggard. General Smuts described her as "a woman who impressed me with her force of char-

acter and intangible air of authority – a woman who really was a queen”.

Mujaji was known to her people, the small Lovedu tribe, as “Transformer of the Clouds”. Once the Lovedu people lived to the north of the Limpopo; but about the year 1500 they migrated to the Soutpansberg foothills, bringing their rain queen with them.

For centuries the rain queen was expected, in her old age, to pass on her secrets to a daughter or younger woman and then to commit ritual suicide by taking poison. Mujaji was prevailed upon by missionaries to break this savage tradition, and she died of old age.

Mujaji was installed as rain queen early this century,² and year after year her reputation and influence grew. She inherited the earthen “rain pots” containing medicines calculated to make the heavens open. She ordered the rain dances and the drumming. Two anthropologists who watched this ceremony declared that the clear, silvery tones of reed-pipes rang out like a peal of bells. Beyond doubt Mujaji was a most successful rain queen. Indeed there were seasons when the lands were flooded and the chiefs approached her nervously, asking for a dry period.

My friend T. C. Robertson, secretary of the National Veld Trust visited Mujaji

² Mujaji died in February 1959, aged eighty-six. It was announced that the tribe would mourn her death for six months and then appoint a successor.

some years ago and tried to discover her secret. He shares my view that there is always a reasonable explanation somewhere outside the realms of magic. I believe the theory he formed of Mujaji's technique is correct.

Mujaji's kraal, Robertson noticed, was built on a ridge with one slope facing south-west and another north-east. On the north-east slope there grows a forest of cycads, weird and ancient plants. It is probably the largest forest of that particular species in South Africa, and botanists have pointed out that the climatic conditions must have been most unusual for such a forest to have survived in a grove facing north-east. The cycads are exposed to the rain winds coming in from the Indian Ocean. They are extremely sensitive to atmospheric changes.

"Mujaji and the rain queens before her were obviously shrewd observers of cycad behaviour," Robertson told me. "Often they had to tell the people that the time was not ripe for making rain. And then one day they would find changes in the foliage and other signs, and they would order the rain-making ceremonies to begin."

Robertson, a keen observer himself and great lover of nature, gave me another example of sensitivity to climate. It was reported to him by Dr. T. G. Nel, biologist of the Kruger National Park. Impala herds break up in spring and the rams bark and fight; signs that the mating season is at hand. One year the natives informed Dr. Nel: "The rains will be late this season – the impala are not yet barking."

That year there was a great spring drought. However, the mating season

was delayed and by the time the young impala arrived, rain had fallen and there was grass for the ewes in milk.

Among the Swazis the month in which the people start planting their kaffir-corn is known as the “impala month”. The bark of the impala gives the signal for sowing. Robertson thinks that these buck, and other animals, sense a change of climate weeks or even months in advance. Along the Vaal River the Goliath heron nests higher than usual in years of flood. These are not psychic phenomena, but forms of animal instinct which have evolved through the ages in environments where survival depends on irregular patterns of rainfall, grass and grazing.

Rainmakers and “rain goddesses” of Africa have no magic, no sense of climate. But they can always watch the animals and the trees ...

Africa has given more to medicine and surgery than the civilized doctors realize. By trial and error, century after century, the tribal witchdoctors made sensational discoveries; and they made them long, long ago, when the doctors of Europe were ignorant quacks. Many of Africa's medical secrets have come to light. I wonder how much more remains unknown to white science?

Now and again I have met doctors who have taken the trouble to investigate the methods of witchdoctors, wizards, herbalists and other more or less skilful African sorcerers and magicians. I travelled for a thousand miles in the Belgian Congo with a French doctor who showed me sights I have not forgotten. One was a deep cut in a man's fore-arm which was treated

by applying a number of ferocious black ants. As each ant bit into the flesh, the ant's body was removed and the wound closed neatly.

The late Senator W. P. Steenkamp, a legendary figure in Bushmanland and Namaqualand, made a deep study of Hottentot and Bushman remedies. Steenkamp worked for years as a minister of religion; but he was called upon so often in medical emergencies that he decided to qualify as a doctor.

One of Steenkamp's stories has lingered in my mind. When he was a boy, there worked on his father's farm a coloured cattle-watcher named Willem Prens. This man had a great reputation as a healer, and Steenkamp investigated his medicines. Among them was dried membranes from a porcupine's stomach, which Prens used with success in treating human

stomach ulcers. Years afterwards an extract from the membranes of pigs' stomachs was adopted by medical science as an orthodox treatment for stomach ulcers. But how did a coloured man (or his ancestors) make that discovery in Bushmanland? I suppose that trial and error is the only explanation.

Sheep's wool was employed by the Hottentots for many skin ailments. Lanoline, the well-known modern ointment, is derived from the wool-wax of sheep, a fat easily absorbed by the skin.

If you have ever suffered from high blood pressure then you may know the drug serpasil, derived from the African plant *Rauwolfia serpentina*. Missionaries reported that native herbalists were using this plant with

excellent results. Decades later it was recognized by white science.

The explorer David Livingstone was, of course, a doctor. He noted that the Zambezi natives were using extracts of the shrub *Stropanthus* not only as an arrow poison, but also as medicine. From that knowledge came the valuable heart stimulant called stropanthine.

One of the most valuable medicines ever devised by natives is a concoction which enable them to cross in safety rivers infested with crocodiles. I cannot supply the formula, but I learnt about this old remedy while travelling along the Okavango River in South West Africa with the native commissioner. Cattle are kept on islands in the river. The cattle swim across with herd boys holding on to their tails; and men and animals pass

unscathed because the water has been treated with the medicine. Natives living round St. Lucia Bay in Zululand have a similar preparation which they smear on their bodies before entering the water. That is another place which teems with crocodiles, but the medicine is always effective.

Basutoland is the home of much witchcraft, good and evil. Missionaries collected many of the medicinal herbs and sent them to the Witwatersrand University for analysis. Apart from love charms and other preparations intended to bewitch people, there were a number of useful medicines and some had poetic names. *Seletjane*, "the carpet of the doctor", is a plant which is crushed and applied to burns. *Letapiso* means "he of the valley who threads the locusts", because the stems are used to thread locusts before they

are roasted. Basutos use the boiled *Letapiso* leaves as a poultice. Then there is *Musapelo* ("to bring back the heart") which the Basutos chew when a great sorrow has fallen on them.

Witchcraft of the deadly sort was punished by death in the days of Moshesh, greatest of Basuto chiefs. No doubt Moshesh curbed the evil witchdoctors, but their black arts never died out. Ritual murders have been only too frequent in recent years, the motive being to secure portions of the victim's body for use as "magic medicine".

Lieut. M. C. van Staaten of the Basutoland Mounted Police made a queer discovery while investigating one of these murders shortly after World War II. He seized a native drug known as *maime*, a sort of Basuto chloroform which is administered by

the murderers so that the victim will accompany them quietly to the place of the killing. One whiff or sip is sufficient. The victim acts like an automaton, and is incapable of resistance. Yet this strange drug remained a secret until the trial of Manapo Koeneho and three others in 1946 for ritual murder. All four men were hanged.

Often the white scientists are baffled when they investigate the substances in common use among natives. Professor J. M. Watt of the Witwatersrand University described a trial in which a tree bark used by a Zulu murderer was tested for poison. Laboratory experts boiled the bark in water, but the extracts proved to be inactive. Only when the murderer himself came to their aid was the secret revealed. He volunteered the information that the

bark had to be administered in powder form to secure results. It was true. The powder was deadly. Professor Watt also noted that it took five years to identify the tree from which the bark had been taken. It turned out to be a species hitherto unknown to botanists.

Dozens of inquests have been held in Northern Rhodesia on members of the Ila tribe who have died after smoking the bark of a tree which botanists call *Phyllanthus engleri*. It is their way of committing suicide. Smoke the bark very slowly and carefully, and the effect is medicinal. Inhale deeply once or twice and you die.

Kenya tribesmen burn their grass to destroy the tick which causes the redwater plague in cattle. They were doing this long before the first white scientist arrived; and when the laboratory experts brought out a treatment for

redwater it was found to be almost identical to the old Masai medicine.

Among the seeming oddities of native treatment is the spider web cure for malaria. For centuries witchdoctors have been making pills from certain webs. Towards the end of last century the Spanish pharmacologist Oliva produced the febrifuge called *Arachnidin*, with qualities similar to quinine – using the very webs selected by the witchdoctors.

Natives of the Alur tribe, living along the Upper Nile, treat insanity by burying the patient up to his neck in an anthill for a time. Formic acid, the pungent ant product, has been used by white doctors in recent years as a tonic and in cases of neurasthenia. Another old African treatment is the bee-sting procedure for chronic rheumatism. This was known in medieval Europe

too, and was revived as an orthodox medical treatment this century.

In the dim past African witchdoctors made up an extract of snails for nasal affections. Some years ago our doctors adopted a glutinous snail extract called *mucin*, for nasal and laryngeal ailments.

Not many botanical remedies have survived in the face of the miracles wrought by penicillin and the sulpha drugs. Some of the old herbs used in Africa have stood the test of time, however, and among them is chamomile. This bitter tonic is still to be found in the modern chemist's shop with the buchu of the Hottentots. *Acacia*, known in the trade as "gum arabic", is another African remedy in demand as a soothing medicine. The calumba root of Mozambique, sliced and dried, is still valued for its tonic

properties. Narcotics which were known and used in Africa for centuries before they reached Europe were the dark green, crinkled leaves of the mandrake and the seeds of stramonium.

Milikila, a remarkable East African native medicine, is given to women in labour. It is a partial anaesthetic. Some of the Tanganyika tribes inoculate their foreheads and shoulders with a smallpox serum of their own. These people also have a method of warding off recurrent fever due to the bite of the spirillum tick. Their herbal cure for headache, brought to light by Captain W. Hichens, an administrative officer some years ago, is so effective that many white people use it.

Every witchdoctor in Africa has a range of laxatives and a bag full of plants with diuretic and analgesic

properties. They know the male fern that removes tapeworm. Indigestion and flatulence yield easily to items in the witchdoctor's stock-in-trade. A long list might be compiled of the emetics and purgatives that have come out of Africa. The full list of poisons, unfortunately, is not yet known.

African witchdoctors are more skilful as pharmacists than as surgeons. Nevertheless, their surgical technique goes far beyond opening abscesses, blood-letting and the lancing of boils. Among the Masai people of Kenya there are primitive surgeons who have enucleated injured eyes, amputated limbs and excised diseased neck glands.

It was in Uganda many years ago that a Dr. Felkin watched a raw native perform a Caesarean section with complete success. I have never under-

stood why Dr. Felkin did not carry out the operation himself, and now it is too late to ask. Perhaps he did not have his instruments with him.

The patient, aged twenty, was having her first baby when the operation became necessary. She was drugged with a potent native drink, banana wine. Before starting work the native surgeon washed his hands in the alcohol and cleaned the patient's stomach with it. The incision divided abdominal and uterine walls simultaneously. Bleeding was checked with a red-hot iron. When the child had been removed, the uterus was rubbed until it contracted. Well-polished iron nails with strong thread twisted round them were used to close the opening. These nails were taken out during the first week, and by the eleventh day the wound had healed. Dr. Felkin reported

the whole procedure in the *Edinburgh Medical Journal* of April, 1884, and there you will find the technical details.

Trepanning, the operation designed to relieve pressure on the brain when the skull has been fractured, was carried out in Africa as far back as the Neolithic period. Moreover, some of the patients recovered. Their skulls tell the story clearly, with convincing evidence of post-operative healing. Apparently the primitive surgeons used germ-free chips of flint or obsidian. Germicidal herbs, fire and alcohol were their antiseptics. Sympathetic friends gathered round chanting and beating drums. The surgeon needed all his skill and daring, and no doubt there was a grand dance of joy when the patient recovered.

Dentists have nothing to fear, and possibly very little to learn,, from the

witchdoctor. After all, what can a dentist do without his forceps? The old-fashioned witchdoctor never invented a method of tooth-pulling which could be compared with the metal devices of the civilized dentists. Nevertheless, the witchdoctor could relieve pain. If a tooth has to come out, the witchdoctor usually applies certain dried roots, ground to powder, which have the effect of breaking up the tooth. It then works its way out in fragments, a tiresome process. Zulu medicine men, and probably many others, possess a herb which will kill the nerve of a tooth.

Zulus are clever at extracting thorns. They knew the use of splints long before the first white man entered their country. Dogs' bones were strapped to the broken limb, and herbal remedies were given to aid the union. Some of

the finest primitive healers in Africa are found among the Zulus. I believe the first South African native to qualify overseas as a doctor was John Nembula, a Zulu, who graduated in 1891 at a Chicago medical school. A white doctor who knew Nembula recorded that while he was not brilliant, he was as capable as many of his white colleagues.

Egypt, the original home of so many civilized arts, probably saw the birth of medical science. The doctors who studied beside the Nile were far superior to the savage witchdoctors of the rest of the continent. Excellent remedies were listed in a papyrus of 1560 B.C. Medical books found in tombs prove that the Egyptian doctors prescribed ointments and plasters, pills and suppositories. Honey and wormwood, herbs and juniper berries,

figs, caraway and nasturtium were among their medicines. One remedy of ancient Egypt, derived from the dried bulb called squill, is in use to this day as a diuretic and expectorant.

One by one the medicines of Old Africa are being discovered and tested. It is hard to estimate how much still remains to be done in this field, but it would be unwise to rule out the possibility of surprises. Early this century the Rev. A. T. Bryant listed more than two hundred plants used by the Zulus as medicines. "It cannot be denied that the native doctor does sometimes work a cure, sometimes quite a startling cure, where the efforts of European physicians have proved utterly unavailing," Bryant declared. "Remedies he has without number, and some of them are truly helpful and

suited to every ill – physical, mental, moral and social – that man is heir to.”

Dr. Michael Gelfand, a recent medical worker among the Mashona of Rhodesia, met a great many native medicine men and formed a high opinion of their intelligence and skill. Often the son of an *nganga* learnt his father's secrets and followed the same craft. Witchdoctors could reason well, said Dr. Gelfand. They were keen judges of human behaviour and botanists of a high calibre. They believed in their methods and desired to help others, and their patients were attached to them.

On the other hand Dr. Gelfand was unable to find any native remedy for those diseases which still fail to respond to white medical treatment. He summed up: “Our hospitals are full of patients with tuberculosis, cancer,

cirrhosis of the liver, diabetes, heart disease, chronic nephritis, pneumonia, high blood pressure, rheumatoid arthritis and leprosy, all treated unsuccessfully by the *nganga*.”

So it seems that the great days of the witchdoctor are over, and that white science has overtaken the arts of the witchdoctor. Only in one respect, perhaps, does the witch doctor remain supreme. He has always been regarded as a magician, and his patients have such confidence in him that he is able to heal them by virtue of their faith. What a magnificent practitioner he is! The white psychiatrist might well envy his performances. “The secret is not in the action of matter on matter, of drug on flesh, but in those occult regions where mind works on mind and mind on flesh,” declared Bryant in Zululand.

Native patients like to have visible signs of relief. The witchdoctor produces them, by means to be found in any conjuring manual. He diagnoses complaints which have been caused by enemies shooting pebbles or other irritants into the victim's body. After due ceremony the pebbles or thorns or even live lizards are revealed. The patient's satisfaction can only be matched in our world by the sight of a tooth after extraction or an appendix in a bottle.

When all is said and done, many patients – white and black – prefer magic cures to scientific treatment. The witchdoctor is only carrying on the methods and trading on beliefs which were common enough in Europe last century and which have never died out. It is because of those beliefs that witchdoctors are so often successful.

Faith-healing, wherever you find it, is not magic. It is a plain example of the power of mind over body, the removal of unconscious stresses which allow the body to cure itself. Within obvious limits, the power of faith-healing is tremendous. And the African witchdoctor knows it just as well as his colleague in Harley Street.

CHAPTER 3

VISIONS IN THE SMOKE

IS THERE such a thing as thought reading among African savages? I believe it is a fact, and that some of the strange tales of telepathy and visions are true. Such experiences seem to occur more often among primitive races than in civilized society. The records are vivid and convincing.

It was in the Kalahari that I first encountered telepathy as practised by a little Bushman clan living near the Bechuanaland border. Deserts are believed to encourage the condition known as "psychic awareness", for in the vast silence there are no disturbing elements. I was with the late Donald Bain, famous desert guide and friend of the Bushmen. One afternoon I saw a column of

smoke in the distance and I told Bain there was a bush fire.

"That's no bush fire," Bain replied. He called a Bushman over to our camp, an old man who spoke Afrikaans, and we questioned him. The Bushman said that some of his people had been out hunting, and they had missed a gemsbok and killed two springbok near the dry bed of the Nossob River. They had also collected roots and honey. The honey would be welcome, remarked the old Bushman, because now they could brew some strong drink.

I watched the smoke carefully, but without seeing anything to suggest that signals were being sent. It went straight up into the windless sky without interruptions. "How is it done?" I asked.

The old Bushman was puzzled. Bain then explained to me that the so called "Kalahari radio" was not a Bushman code like Morse, but something more mysterious. "They look at the smoke, and the message comes to them," Bain declared.

After long cross-examination of the old Bushman I gathered that the smoke was a "calling up sign" rather than a signal. It meant that the distant hunters had something to say. Then everyone concentrated on the smoke, and soon certain people knew what was going on and told the others. Some could "read the smoke", others could not. Bain thought the smoke was like the crystal of the clairvoyant. By staring into the smoke they put themselves in the right frame of mind to receive the message. But it was done by

thought reading, not smoke signalling.

Very complicated messages come over the "Kalahari radio," and they come too fast for a primitive signalling system. Bain also assured me that the smoke was not essential, and that members of the Bushman clans often communicated over long distances without it. Years afterwards I read an account of the use of smoke by Australian aboriginals. "I make a smoke so that the other man knows I am thinking," explained one tribesman. "And he is thinking, too, so that he thinks my thoughts." There at last was striking confirmation of the old Bushman's statement. Primitive men in different continents were keeping in touch with their fellows by exactly the same method.

So much evidence of thought reading has been written down, checked and confirmed that coincidence may be ruled out. I only wish that I could explain this deep mystery. "Vibrations of thought" have been suggested; but it seems unlikely that any form of physical energy can reach out as telepathy does and impinge on another mind with such force that a similar idea is received.

Telepathy is unconscious. It is an effortless relationship which may work in the dream state as effectively as at other times. A. N. Whitehead, the English philosopher and mathematician, held that events constituted the ultimate components of reality, and that everything in the universe was linked with everything else. Kenneth Walker, surgeon and student of telepathy, argued from this

theory that "telepathy is a phenomenon to be found in a primitive form, as a sense of awareness of what is happening at a distance, in all living organisms". Professor Banesh Hoffmann, the American physicist, thinks telepathy works like gravity, which also penetrates all obstacles. "It may be physical, or it may be something strange, obeying laws of propagation transcending space and time and behaving in a way absolutely new to science," Hoffmann declares.

If this mystery is ever solved it will probably be done with the aid of primitive people, and possibly in one of the African deserts. Kenneth Walker has pointed out that "extra-sensory perception" (a scientific term covering telepathy, clairvoyance and similar phenomena) is very common

among primitive races. Those are the races in which the older part of the brain still works keenly in the old way and gives some knowledge of what is happening elsewhere.

Civilized people have proved telepathy, but they have not been able to reveal the process. The savage may yield this fascinating secret. All that I can do in the meantime is to give some examples of telepathy in Africa, the legends and the facts.

Many great events are supposed to have become known by telepathy among natives, especially wars and other disasters. King Cetewayo's victory over Colonel Durnford at Isandlwana in the Zulu War was said to have been known up and down Natal faster than any system of communication available eighty

years ago. When Cetewayo was captured at last he was kept as a prisoner in Cape Town, but treated with some kindness. Mr. R. C. A. Samuelson, who was attached to Cetewayo as interpreter, kept a diary and recorded Cetewayo's dreams and prophecies. Mr. Samuelson later became an outstanding member of the Native Affairs Dept. in Natal, and his diary is an authentic document.

One day in September, 1881, Cetewayo remarked to Samuelson: "Last night I dreamt that I had been restored to Zululand. My father and mother kissed me so much that I felt quite bitter about the mouth." On another occasion Cetewayo pointed to a comet near Table Mountain and declared: "That is a sign that the Queen will restore me to Zululand."

Cetewayo's exile did indeed come to an end two years later, but neither the dream nor the comet can be regarded as significant.

But here is an entry in Samuelson's diary which is not so easy to dismiss. "September 12, 1881. The King dreamt that Masumpa had given in, and that there was peace in Basutoland." Masumpa, third son of the Basuto chief Moshesh, had been in revolt against the Cape Government, and a very large force had been sent to deal with the rebellion. Masumpa had attacked Maseru with five thousand men, and had been in the field for nearly a year when Cetewayo told Samuelson of his dream. There was no reason to suppose that Masumpa was on the point of surrender. Masumpa had held aloof from the settlement proposed by Governor Sir Hercules

Robinson. However, the end came unexpectedly and on September 13 news reached Cape Town that Masumpa had accepted the award. "The strange thing about the dream was that it was dreamt before the King or any of us knew of the surrender of Masumpa," recorded Samuelson.

Among the dramatic episodes of the Zulu War was the death, so often described, of Louis Napoleon, Prince Imperial of France. He had gone out with an officer and six troopers on a reconnaissance, but the Zulus surprised them and the prince was stabbed to death while trying to mount his horse. Mr. W. T. Stead, that ardent spiritualist, always maintained that the whole tragedy had been seen in a crystal by the Empress Eugenie long before her son had ever thought of going to South Africa.

The loss of the troopship *Mendi* in the English Channel during World War I is often quoted as an example of news spread by telepathy among natives. She went down after a collision, and hundreds of South African natives (bound for France as a military labour force) were drowned. The disaster was kept secret for some time, until the full casualty list had been compiled; then General Botha made the first announcement in Parliament. According to a legend which has often been published, scores of Bantu women were mourning for their husbands long before the official news was released.

Such stories may or may not be true. A scientist investigating telepathy would rightly demand some written record by a reliable person, timed and dated, and a detailed statement by the person who had become aware of the disaster

thousands of miles away. It is so easy to be wise after the event. I cannot vouch for the *Mendi* story, but I can relate a few less sensational experiences, given to me by an observer whose word I accept without question.

It was in April, 1912 that my friend Major P. C. Lawrence was “sitting up” for a lion near the askari lines (the barracks occupied by native troops) at Port Herald in Nyasaland. Just as the “lights out” bugle sounded, Major Lawrence got his lion. Next afternoon Major Lawrence met the train from Blantyre. A planter stepped off and remarked: “I hear you got a fine lion last night, Lawrence.” Cross-examined by the startled Lawrence, the planter stated that his native servant had given him the news before the train had left Blantyre station early that morning.

Blantyre is one hundred and ten miles from Port Herold, and there was no ordinary means of communication after the Port Herold railway telegraph office closed at five in the afternoon. Major Lawrence interviewed the station-master, an Indian, immediately and confirmed the fact that the telegraph office had been closed and locked at the usual time. The planter had asked his servant how he had heard about the lion, but the servant had merely shrugged and replied: "I just know, *bwana*."

Another personal experience which Major Lawrence related to me occurred during the Christmas holidays in 1912, when he was stationed at Zomba, the Nyasaland government centre. He went with a friend to Nkulu's Hill, twenty miles north of Zomba, on a shoot.

"We set off at five in the morning, and to prevent accidents I marched eastwards with my native hunter while my friend Jack turned west," Major Lawrence began. "At 10.50 a.m. I sat resting on a rock and watched some baboons. My hunter asked me for matches, as he had found a bees' nest and wanted to smoke them out. He was back within a few minutes, returned the matches and announced: "Bwana Jack has shot a cow kudu." I asked him how he knew and he gave the usual reply: "I just know."

"As we were on a high ridge I thought he might have heard a shot and guessed it was a buck. We moved on, and returned to camp at five in the evening. Jack arrived ten minutes later, and he was astonished when I told him that he had shot a cow kudu. We always avoided killing the

females, and Jack explained that he had aimed at a male kudu and that the female had jumped forward just as he pulled the trigger. That was at about eleven o'clock.

“When we compared notes we discovered that he was about twelve miles to the east of the camp when he had shot the kudu, while I was about the same distance to the west. *The sound of the shot could not have been heard over that distance.*”

Finally there was a World War I episode for which Major Lawrence was again able to give chapter and verse. Detachments of the King's African Rifles and Nyasaland Volunteers had gone north to Karonga, while Major Lawrence had been left at Zomba to train recruits. On the evening of September 9, 1914, native women in the K.A.R. lines at Zomba

began wailing. When Major Lawrence investigated the incident he was informed that they were mourning for their dead husbands. His informant added that some white officers had also been killed in action.

Next day a telegram arrived from the officer in command at Karonga, giving news of two encounters with the Germans, and the casualty list. Several white officers had been killed, and a number of askaris had been killed or wounded.

Major Lawrence's experiences may seem unimportant in comparison with the historic events which are said to have been spread by telepathy. Nevertheless, I think they are more valuable than many other dramatic stories because they carry the authentic ring of life in the African bush. I am not prepared to accept coincidence as the

explanation of these pages from a regular army *officer's* career in Nyasaland. That was genuine telepathy.

Another informant of mine whose evidence was absolutely reliable was the late Mr. Frank Brownlee, the magistrate, a member of the famous Brownlee missionary family of King William's Town. Frank Brownlee and his ancestors understood the mind of the African far better than most white men of their times. I have always felt honoured that such an authority as Frank Brownlee should have read my books, year after year, and written long letters to me commenting with great kindness on my work and adding enormously to my knowledge of the subjects I discussed. I treasure his letters.

One incident which convinced Brownlee that certain natives were clairvoyant occurred while he was hunting in the Kalahari. An old Bushman came to his camp fire, smoothed the sand and "threw the bones". After a time the Bushman made this prophecy: "You will move to the north in two days' time. You will remain there for some time, and no harm will come to you. But then you will trek to the south in a great hurry, not by the donkey-wagon you have with you here, but by motor-car."

Brownlee had intended to trek in two days' time, but he had not mentioned this decision to his servants. He moved on, camped at a waterhole called Namkaub, and sent the donkey-wagon away with orders to return for him in one month's time. While he was at Namkaub a Bushman runner arrived

with mail, and Brownlee became aware of a matter that called for an urgent reply by cable. He was two hundred miles from the nearest telegraph office and he had to wait for the donkey-wagon before he could start the journey.

After one month the donkey-wagon reached the camp. Brownlee set out southwards as fast as the donkeys would take him; but he had not gone far when he was intercepted by a motor-car. The old Bushman had been right in every detail.

A queer vision came to Frank Brownlee's notice as a magistrate. The village hotel proprietor and his wife were going to the seaside for the weekend, and the husband drew twenty-five pounds for expenses. The money was stolen. Police failed to catch the thief, and so a native diviner was consulted.

After listening carefully to every detail the diviner stated that the money (all but one pound) had been buried near a large rock at the source of a local stream which he named. The diviner named the thief, a hotel servant. This information proved to be correct, and the thief confessed. Brownlee was certain that the diviner had no knowledge of the theft before the consultation.

I often discussed telepathy and other mysteries with Dr. B. J. F. Laubscher, at one time a psychiatrist on the staff of a Cape Town mental hospital. Dr. Laubscher studied divining among the natives of the Transkei and wrote a scientific work entitled "Sex, Custom and Psychopathology – a study of South African pagan natives". He became convinced that apart from a great deal of quackery, genuine clairvoyants

were to be found among the natives. And he gave as an example a diviner who located stolen cattle sixty miles away, and named the thief. Dr. Laubscher could find no ordinary explanation of this feat.

Scientific investigation has shown that telepathy and clairvoyance follow the same general principles among people of all races, professors or Bushmen, Englishmen or Africans. There is what is known as "crisis telepathy", which operates when distant friends and relations are ill or dying, and sometimes on happier occasions such as births.

'Some of the incidents I have related are without those rigid scientific controls which investigators must demand. I am not very happy about such examples, and I shall believe in people talking or writing languages

they do not know only when I am able to satisfy myself that there has been no trickery or self-deceit. Similarly I am still dubious about the gift of second sight. Premonitions may be based on nothing more mysterious than common sense. I have had premonitions myself. J. W. Dunne, author of "An Experiment with Time", remarked: "If prevision be a fact, it is a fact which destroys absolutely the entire basis of all our past opinions of the universe." Dunne believed in prevision, and believed that he had proved it mathematically. Yet I am dubious.

But telepathy seems to me to be in a different class. It is emotional, perhaps, and certainly not supernatural. I only know that we are still standing on the threshold of knowledge of the human mind. Thought is a mystery.

When they can tell us how we think,
thought-reading will be no mystery at
all.

CHAPTER 4

THE WIZARD OF HUMANSDORP

HENDRIK SPOORBEEK was the most famous miracle worker of Afrikaans folklore, a *towenaar* as they say in the country. It is too late now to go round the Humansdorp district looking for people who knew Spoorbek, though I prefer that method when it is possible. But this Ou Spoorbek died in 1845, and the fact that so many supernatural tales are told of him after more than a century does suggest that he was a most remarkable character.

I do not believe in magicians, as I have said before. Spoorbek interests me because it is still possible to form a pattern of the man's life and solve the mystery that no one has approached so far – the secret of his great reputation. Spoorbek enjoyed more than local fame. Some people in the cities may

be hearing of him now for the first time, but among Afrikaners he is remembered from the Cape to Northern Rhodesia. And to this day a man who performs feats suggesting wizardry is known as a Spoorbek. So now I am going to repeat the gossip and the legends, and give you all the facts I can find, in the hope of discovering how Spoorbek managed to make such a deep impression on everyone he met.

Spoorbek was a real man, of course, and not a mythical wizard like the Pied Piper or the Merlin of King Arthur's court. Born at Dortmund in Germany, he arrived at the Cape as a sailor about the year 1811 and deserted. His real name was Heinrich Schorbeck and some called him Skoorbek; but Spoorbek was the usual form and he became so tolerant of the change that

he signed his will as Hendrik Spoorbek.

He must have arrived in Humansdorp in or before 1815, for on April 14 of that year the farm called Spoorbek se Erf was surveyed. The size was fifty-eight morgen, and he agreed to pay five rix-dollars a year quitrent. You can no longer visit Spoorbek se Erf, however, for it lay along the Krom River and it is now under water. The Port Elizabeth municipality dammed the river during World War II as part of a water scheme.

Spoorbek had a small thatched cottage on the farm. Besides farming he worked a water mill and ground wheat for the whole neighbourhood. But he was also a great traveller, riding everywhere, doing various jobs and treating the sick. *Skilpad se koning en die wapad sy woning*. That was

why he became known over such wide areas.

Some of the farmers wrote down their experiences with Spoorbek during his lifetime. Early this century there were still a few people alive with personal memories of the wizard. Mr. J. R. van der Merwe, a school teacher who went to the district in 1901, recorded some of their tales. Thus we learn that Spoorbek was an untidy, eccentric hermit with wild, curly hair, a long beard, black clothes in rags, and a verminous appearance. He rode a white horse.

Many a hospitable farm wife trembled when this strange figure arrived at the homestead for the night. Some insulted him and lived to regret it. For although Spoorbek was a kind-hearted man, he believed in teaching a lesson in manners here and there. As he

seemed to read people's thoughts, the effects were devastating.

One night Spoorbek slept at the farm Jagersbos with the Meiring family. When he had gone one of the women remarked: "Look, the old pig has forgotten his tobacco pouch." Spoorbek returned some time later, collected the pouch, and embarrassed the woman who had spoken by repeating her words. Another woman who was rude to him found that she had lost the power of speech, and she had to call in Spoorbek before she was able to talk again.

Then there was the incident of the young couple who passed Spoorbek in the street at Humansdorp and laughed at him openly. "Oh my, here comes the old *towenaar*," the girl jeered. Spoorbek looked at them keenly. "You two think you are going to be

married," he remarked. "But remember this – you will never be married!" The wedding day came, and the minister started reading the service. While he was speaking, the bride left the church by one door and the bridegroom by another. They had both thought better of it for reasons known only to themselves and they were never married.

Spoorbek never locked the door of his cottage. Sometimes he would be talking to a neighbour, and then a dreamy look would come over his face and he would say: "I must go home – someone is trying to rob my house." He had a way of dealing with thieves. Once he entered his house to find a young man pouring himself a glass of brandy. Spoorbek stared at him. The man remained transfixed, unable to put down the bottle and glass. Only when

he pleaded for his freedom did Spoorbek release him.

Now and again a man would be in the act of stealing Spoorbek's mealies or tools when he would feel a pain in the back as though needles were being driven into his flesh. Then he would find himself impelled to carry the stolen goods back to the house. Spoorbek would be expecting him. And always the thief would discover that his hands were clasped rigidly over the object he had stolen; and only Spoorbek could set him free.

Everyone dreaded fires in those days of thatched roofs and great forest blazes. Spoorbek was credited with weird powers in putting out fires, and when a miskraal fire smouldered dangerously for days and could not be controlled, Spoorbek was the man to master it. But his feats went far beyond that sort of

demonstration. It was said that he could protect a dwelling against fire, and his magic worked! Years later, when the thatch was removed from these houses, people put a match to it to see whether Spoorbek's spell remained effective. And sure enough, the thatch would not burn. The homestead Uitvlucht used to be pointed out as one of the houses Spoorbek had protected. But when new thatch was laid after Spoorbek's death, some of those homes caught fire easily enough.

One historic episode in which Spoorbek took part was the defence of Kerkplaats (now Alexandria) in the Olifantshoek area against the Xhosas in the Sixth Kaffir War of 1934-35. This was a serious affair in which many white settlers were murdered, hundreds of houses were burnt and about three

hundred head of cattle and sheep were lost.

Spoorbek was at Kerkplaats when the Xhosa horde surrounded the church and the schoolhouse next door. The other houses in the dorp had been destroyed, and the white people were making their last stand in the schoolhouse.

To their horror the men of the commando, and the women and children who shared their danger, saw that the thatch of the church was on fire. "Be calm – the school will not burn," Spoorbek assured everyone. The natives came on with flaming branches, and threw them on the thatch of the schoolhouse roof. But the defenders used their guns to such good effect that the natives were driven off. The church, built in 1830 by Karel Landman the Voortrekker had to be

rebuilt; but the schoolhouse remained unharmed and stands to this day. Ouderling Marthinus Scheepers replaced the thatch with a zinc roof in 1873, and many people assembled to watch the familiar test. No, the old thatch would not burn. Coloured people, firm in their faith in Spoorbek's magic, carted it away to thatch their huts. Some say that the church and schoolhouse at Alexandria should be declared historic monuments in memory of Hendrik Spoorbek.

Spoorbek was always something of a showman. When he was called upon to protect a place from fire, or to put out a difficult fire in a manure heap, he rode round the scene first on his white horse. This was part of the magic, like the folded papers which the owner of the property had to take out into the veld and throw over his shoulder. Spoorbek

made it a condition that dancing must be forbidden in any house he protected.

Many farmers called in Spoorbek as a doctor, and he was especially clever in treating mental disorders. He was not afraid of doing minor surgery, however, and some of his simple operations have been greatly exaggerated. (One legend declares that Spoorbek cut off a man's head and sewed it on again.) He helped many people, and never accepted payment for his medical services.

Nevertheless, he must sometimes have been regarded as a sinister figure. One night Spoorbek was called to the farm Langvlakte near Alexandria, where a Mrs Potgieter was seriously ill. Her sister-in-law was nursing her. "It is marvellous – the dead look after the living," remarked Spoorbek as he entered the bedroom. His meaning

became clear when Mrs Potgieter recovered and the sister-in-law died.

A husband called at Spoorbek's farm one day and urged him to come at once because his wife was ill. "Your wife will not die," Spoorbek declared. "First let us eat some watermelon." Spoorbek then planted a seed just outside his cottage and threw a large cloth over it. When the cloth was removed, the seed had sprouted. Step by step the astonished farmer saw a watermelon become larger and larger, until Spoorbek cut it and handed him a ripe slice. Only then did they go on their way.

Spoorbek once warned a family at Sandhoek, Humansdorp, that one of the children would go blind as a result of injury by prickly-pear thorns. Those children never forgot the fearful prophecy. One of them (who lived until

World War II) visited the doctor every few months to have his eyes examined.

One of Spoorbek's cures which is often recalled was the drink of rusty iron in boiling water given to a consumptive child. Not only did the child recover, but he grew extremely fat.

Anyone who suffered from ghosts went to Spoorbek for relief. And when Spoorbek sat up in the haunted house with his famous red handkerchief with magical properties, the ghosts soon departed.

Spoorbek presented charms to protect travellers. He was on friendly terms with the Voortrekkers who left the Humansdorp district – Karel Landman, Piet Uys and Gert Rainier. When Rainier left the colony in 1837 he carried one of Spoorbek's packets round his neck. Spoorbek made him

promise that he would not open it, and assured him that would never be killed by an assegai. Rainier lost his horse at the Battle of Blood River, but escaped with his life. In his old age Rainier opened the packet at the request of his daughters. It contained four pieces of white paper.

Snakes never harmed Spoorbek, and he would not allow anyone to kill a snake in his presence. It was said that snakes lay still and did not move when Spoorbek walked past. He claimed to be able to call a gathering of all the snakes in an area between two rivers if he wished. Apparently no one challenged him to carry out this feat. Spoorbek's favourite trick, however, was to make water run uphill, and many tales are told of farmers watching in consternation while Spoorbek influenced the water in

their irrigation furrows. While trekking with transport riders, Spoorbek was asked to protect the oxen from theft at night. Spoorbek drew a circle round the oxen, and they remained there in perfect safety. Next morning, however, when the time came to inspan, the oxen would not cross the magic circle until Spoorbek came and led them out.

Jan Viljoen the hunter, the man who reached the Victoria Falls shortly after Livingstone, called at Spoorbek's cottage one afternoon and asked Spoorbek to accompany him to a funeral. Viljoen offered to go into the veld and bring Spoorbek's white horse to the door while Spoorbek was dressing. "No, don't do that – the horse will know when I want him," replied Spoorbek.

And when they were ready the white horse trotted up to the stoep.

Spoorbek was a *siener*, a prophet, as I have related. He told the Humansdorp people that a forest fire would break out; and soon afterwards the whole world seemed to be on fire and a number of people lost their lives. During a drought he warned a Gamtoos River farmer against flood. The river came down three nights later, sweeping the farmer's stock and vegetables into the sea. He is supposed to have prophesied the invention of trains and aeroplanes, the South African War and the Spanish 'flu epidemic of 1918.

One of Spoorbek's friends, who lived eighteen miles away, wanted the wizard to take charge of his funeral arrangements. "How will you

know that I am dead?" this man asked Spoorbek. "A mysterious star will be seen in the sky, and then everyone will know," Spoorbek replied. The star was seen, and everyone met for the funeral before any message reached them.

Spoorbek always told his friends that he would die on the night of a great storm, and that his body would never be found. According to legend, a girl of fourteen (later Mrs Strydom) saw Spoorbek dressed in white going up to the sky during a thunderstorm. Such is the power of imagination. Spoorbek's prophecy was false, and he died on his farm on June 13, 1845 and was buried near the track leading to his farm. It was pointed out to many people in later years by those who attended the funeral. Though the farm Spoorbek se

Erf was flooded, the grave remained above the water level.

Spoorbek asked that certain books should be buried with him, and his wish was carried out. He was supposed to have buried his money on the farm and uttered a warning that anyone who dug it up would be paralysed for life. His will may be seen at the Master's Office in Cape Town. Petrus Hendrik du Pree was his heir, and he left him a collection of pots and hammers, chisels and augers, a saddle, a table, five shirts and two pairs of trousers. No money was found, and the wizard was, in fact, insolvent when he died. A farmer named I. J. du Plessis of Misgund claimed eighty pounds, which he had lent to Spoorbek. The quitrent had not been paid for five years.

How did Spoorbek achieve his reputation as a wizard? People often

asked him to reveal his secret, and sometimes he told them that he had brought a book of magic to the Cape with him, and that it had been stolen shortly after his arrival. Another answer which he gave (possibly when he was in a humorous mood) was that anyone could perform similar feats provided they found a flower called the *Faroblom* which bloomed once a year and during one hour in the night.

Putting this witticism aside, I think it is perfectly clear that Spoorbek was a clever hypnotist. That would account for the thieves who found they could not drop the articles they had stolen. Stripped of the embroidery, you can see that Spoorbek caught them in the act; and his hypnotic suggestions and their fear of the wizard completed the process.

A good example, which rings true, is a story of a Hottentot who raised his arm and threatened to strike Spoorbek. The wizard spoke to him, and suddenly the Hottentot found that his arm had become rigid. Spoorbek was also famous as the man who could cure headaches – typical hypnotic procedure.

Another incident which can be explained by hypnotism occurred when a man borrowed Spoorbek's white horse without permission. When he rode up to Spoorbek's door the old wizard came out and told the man that he would have to remain in the saddle until sunset as a punishment. And this the man did, for he was unable to dismount.

Spoorbek probably brought with him from Germany some formula used in Europe for treating thatch to render it

fire-resistant. He was a thatcher in his spare time, and all the stories of the protection he gave really boil down to the use of a simple chemical preparation.

His prophecies were either vague or else they rank as shrewd guesses. On the strength of his prophecies alone he would never have gained the stature of a wizard. However, he made one interesting prophecy which came true many years after his death. He was fond of honey, and often climbed a steep rock beside the river to rob the wild bees that had nested there for centuries. "No one will take honey from that nest when I am gone," he told his friends. "It will be covered with water one day." And this came to pass, when the Port Elizabeth water scheme was completed almost a century after the death of Spoorbek.

Weird tales of Spoorbek have become more wonderful with the passing of the years, and it is impossible to explain them all now. But he may well have had the gift of clairvoyance, and that would be remembered. That he was no mean conjurer is shown by his performance with the watermelon; a South African version of the mango trick calling for that quickness of the hand which deceives the eye, and the essential cloth to cover the watermelons of various sizes.

Spoorbek understood the people of the platteland and brought them knowledge from Europe which must have seemed miraculous to simple country folk. He was obviously a good-natured and religious man in spite of his forbidding appearance. "We must serve God from sunrise to sunset," he often declared.

Long after Spoorbek's death a *wonderdokter* or medical quack rode up and down the Transvaal and Free State calling himself Spoorbek. He offered cures for human diseases and also protection against locusts, hail and fire. Spoorbek would have known how to deal with that impostor. He would have stuck to his saddle all night, speechless in spite of needles jabbing him in the back.

CHAPTER 5

SECRETS OF THE SNAKE CHARMERS

SNAKE CHARMING is a strange and dangerous profession. Nearly all the snake charmers that I knew were killed by their own snakes. One secret that eludes these fearless entertainers is the secret of survival.

I think the art of snake charming must have started in Egypt, the land of many origins. Villages of Egypt are cursed by snakes, and for that reason, perhaps, the most skilful snake hunters and snake charmers in the world are to be found there. Beside the Nile I have watched performances far more cunning than anything I saw in India.

Cobras appear as marks of regal dignity, as tiaras on Egyptian statues. Cleopatra's asp was a cobra. Magicians of the Pharaohs could turn serpents into



Snake charming is a strange and dangerous profession. Nearly all the snake charmers that I knew were killed by their own snakes.

rods, imitating the miracle wrought by Moses. This, I believe, is done by compressing the snake's neck so that the brain is affected and the snake becomes rigid.

Witchdoctors up and down Africa know a great deal about snake psychology. White people in tropical Africa sometimes call in a witchdoctor when they suspect the presence of snakes in their homes; and the *mganga* seldom fails to discover a snake and claims his fee. What are five or ten shillings when a house has been cleared of mambas?

So the witchdoctor arrives with his reed pipes. He recites his piece, playing here and there until at last a mamba slithers into the open; a thing of sinuous beauty, but with enough poison in its fangs to kill an elephant. At the right moment the witchdoctor reaches out with his forked stick, secures the snake

and drops it in his bag. Now this is nearly always accomplished by trickery. It is a trained snake without fangs that is planted in the bungalow and "charmed" from its hiding place.

Probably the finest snake charmer of his day was Sheikh Moussa (the Arabic form of Moses) of Luxor, who was known to many thousands of tourists. Moussa's grandfather and father had been snake charmers before him, and both of them had been killed by snakes. One day Moussa's youngest son went out into the desert to collect snakes, and he received a fatal bite. Moussa always expected to go the same way. One day in 1939 he reached into a snake hole and received a fatal bite.

Sheikh Moussa was absolutely genuine. He allowed himself to be stripped and searched before giving a performance. The snakes he drew out

of holes beneath mud huts were untamed snakes. He could smell a scorpion under a stone or a snake in its furrow. The odour of a snake, according to Moussa, was like ammonia.

Chanting and singing, Moussa lured the snakes out of their holes and called them to him. Sometimes a cobra would attack. Moussa would throw the snake back gently with his stick. Then the cobra would rear up and watch the snake charmer intently. This seemed to give Moussa his chance. Slowly he would approach the snake, always chanting incessantly. At last he would place his hand on the ground, and the cobra would lower its head and rest it in the palm of Moussa's hand.

Other snake charmers, including a head-keeper named Budd at the London Zoo, have been able to perform

the "head in palm" act. It was always the climax of the show given year after year by that very clever charmer Hoosain Mia in Cape Town. But old Moussa had other sensational tricks which few other charmers, past or present, can have performed.

Moussa would put a wild, newly-caught cobra in a circle which he drew with his stick in the sand. And there the cobra would remain as though imprisoned until Moussa gave it permission to leave. I understand that almost anyone can hypnotise a hen in this way, but just try it with a cobra. As a finale to a snake-catching expedition, Moussa would place four or five snakes in the circle and charm them as a group. Their efforts to escape would be obvious to every onlooker, but no snake moved very far when Moussa's eye was upon them.

No doubt Moussa was merely building up atmosphere with his incantations, for snakes are deaf. However, they do respond to high-pitched flute music. There is a theory that certain airborne vibrations impinge on the scales or rib tips of a snake like footsteps on the ground. A cobra is aroused and excited rather than charmed by the flute.

Watch a snake charmer with his flat cobra baskets, and you will see that he does not rely on his flute to bring the snakes out for a performance. He gives each basket a tap, and the snake emerges. The skill of the snake charmer is genuine enough, but those who watch a performance seldom realize that things are not what they seem. The writhing and swaying of a cobra in time with the snake charmer's tune is nothing more than

the snake's attempt to follow the movements of the man's hand. Study the snake charmer carefully, and you will see that clever movements of the hand and body control the actions of the snake. He reaches out slowly, always, to avoid alarming the snake. And when a snake shows signs of temper he puts it back in the basket and selects another snake to carry on with the dance.

Hagg Ahmad, another famous Egyptian snake charmer, and friend of Russell Pasha, claimed to be able to hypnotise a snake by whistling to it. He collected rare snakes for zoos and serum manufacturers. Hagg Ahmad was a member of the Rifai, the secret society of snake charmers with strict rules and religious leanings. He inoculated himself according to the methods of the Rifai, but there is no

such thing as complete immunity to snake bite. His career was very successful – up to the day when a cobra killed him.

Russell Pasha had a snake expert on his staff in the Cairo City Police, an Englishman named Bain. Russell and Bain studied the technique of snake charming independently, and arrived at very similar conclusions. They decided that the secret of luring snakes out of their burrows often depended on mimicry. Nothing would move a hibernating snake, of course, but during the mating season the charmer would imitate the peculiar hissing call of the female snake and bring the male into the open.

A different explanation, given to me in Egypt, was that the experienced snake charmer makes use of a sub-

stance excreted by snakes, which has the property of attracting other snakes. I believe there is scientific support for this theory. It is said to be particularly effective when vipers are being collected.

Russell Pasha pointed out that a charmer needed keen eye-sight and quick hands. I would add to those qualities the ability to concentrate on the job at all times and at any age. Many a snake charmer has died simply because he was thinking about something else when he should have been watching his snakes.

When I first encountered the sands and the chicanery of Egypt five years after World War I, there was a type of youthful snake charmer whose performances were so revolting that the government had to limit such activities. These daredevils would come up to

your cafe table on a Port Said boulevard, or even the sacred terrace at Shepheard's, and offer to devour a cobra alive. Some people were always willing to pay for this treat, but it made strong men feel ill and women fainted. Such performers no longer appear at the fashionable hotels.

I remember one young fellow who carried scorpions in his long black hair and kept his cobras next to his skin. Some of them anointed their bodies with snake fat in the belief that they were ingratiating themselves with the snake tribe; and perhaps they were. One trick which they performed baffled me for a long time. The charmer seized a cobra by the throat, forced the wicked mouth open and spat into it. Not a refined sort of entertainment, but the effect on the snake was extraordinary. In a second it became rigid, and could

be handled like a walking-stick. Years afterwards I was told that the charmer had some narcotic in his mouth, a drug that acted without delay when transferred to the snake. It was just another of those tricks that looked like magic.

Some charmers will pretend that a cobra has bitten them, and display two little incisions in a finger. You may be sure that the "bite" was there before the performance started. These men usually apply a porous "snake-stone" to the finger – a remedy they would never use for a genuine bite.

Cobras are the snakes favoured by snake charmers everywhere. No doubt the sinister hood adds to the thrill of the performance. It should be noted that the cobra spreads its hood only when it is excited. Thus the snake is not under the influence of hypnotism when it sways

to the pipes of the charmer and it is certainly not dancing. Most probably it is wondering what the charmer is going to do next, and you may be sure that the charmer is watching the snake's eyes keenly to see that it does not strike at his hand.

Africa has seven of the *Naja* species of cobra, and they are so common that the snake charmer has no difficulty in collecting his stock-in-trade. The so-called Egyptian cobra, which is found from the Mediterranean to South Africa, is not a spitting snake. Neither is the Cape cobra; but the ringhals and the black-necked cobras aim at the victim's eyes and reach the target when it is as far as seven feet away. So you will rummage in the snake-charmer's bag for a long time before you discover a spitting snake. That would be a suicidal performance.

Egyptian snake charmers often exhibit the very poisonous horned viper. They also catch the dangerous carpet viper, but this is a rare species.

Hoosain Mia, the snake charmer whose performances in Cape Town I mentioned earlier, used to send to Burma occasionally for a king cobra. This is a spectacular snake; in fact, it is the largest poisonous snake in the world, and it looks formidable among the smaller (but no less deadly) specimens at a show. The largest king cobras run up to eighteen feet. They are cannibals, and the charmer who keeps one is liable to lose the rest of his snakes if he is not careful.

Unfortunately the king cobra does not survive for long in South Africa. Hoosain Mia lost fourteen expensive specimens, one after the other; but the good ones enlivened his show while he



Hoosain Mia was so fond of the Cape that he called himself 'Cape Town Charlie'. He lived to seventy-five. A Cape cobra which he was training bit him in the right thumb. Treatment in hospital came too late.

had them. Some are striped, others are vicious. Yet every snake charmer longs for the applause which only a huge and amenable king cobra can bring him. This is the snake for the “kiss of death” act which a few women snake charmers perform. Something like hypnotism is indeed necessary when you kiss the snout of a king cobra.

Hoosain Mia was so fond of the Cape that he called himself “Cape Town Charlie”. He was a graduate of the Poona university of conjuring, fire-eating and snake charming, as befitted a member of a long line of Indian magicians. Hoosain Mia arrived in South Africa towards the end of last century, and there was hardly a village in the Rhodesia’s and the Union which had not watched this turbaned, bearded, smiling performer with the little tom-

tom and the snakes. He claimed to have appeared at Buckingham Palace. (“I make de snakes dance for King Edward and King Jarge,” he boasted.) He certainly performed at Government House in Cape Town, but his traditional pitch was near the entrance of the Adderley Street pier. When the pier was demolished he usually performed on the Parade.

Among my memories of Hoosain Mia is one childish piece of humour which I must have watched scores of times without being bored. Hoosain would produce a small basket with a lid. Then he would select a suitable victim from the crowd, preferably some lout who had been jeering at the performance. The victim would be asked to examine the basket carefully and show everyone that it was empty. Hoosain would cover the

basket with a cloth, play a few mystic bars on the flute, bring out the basket and ask the victim to cup his hands beneath it and catch anything that came out. The whole success of this trick lay in giving the victim to understand that the basket had been filled miraculously with money. Next moment the terrified victim would find a live snake in his hands. It was a harmless snake, but it did not look harmless. I may have a primitive sense of humour, but seldom in my life have I laughed more heartily.

Hoosain Mia could give a performance lasting for hours without repeating a trick or a joke. He presented a fairly smooth version of the basket trick until his son Ibrahim grew too large to squirm round the sides of the resilient basket

while Hoosain plunged a dagger into the wickerwork. But old Hoosain was above all a snake charmer. He sent his son to Poona to acquire the right polish and take over the family business.

Hoosain Mia entertained me from my boyhood until I had reached middle-age. He lived to seventy-five, possibly a record for a member of this hazardous calling. A Cape cobra, which he was training, bit him in the right thumb while he was performing outside the Mount Nelson Hotel during World War II. They called Hoosain's son, who was giving a snake show of his own about a mile away. Hoosain was unconscious by this time, and the treatment in hospital came too late.

Dr. Hamilton Fairley, who was interested in this deadly game,

followed the careers of twenty-one snake charmers over a period of fifteen years. Nineteen of them succumbed to snake venom during that time. In South Africa I remember one showman after another who handled snakes once too often. Bertie Peers, known to scientists and naturalists all over the world, was the most celebrated of them. His real business was selling snakes to museums, and “milking” snakes for the venom used in preparing snakebite serum.

Peers should never have been in that business. He had a weak heart, and every bite made him wonder whether he could stand the treatment. Once a puffadder struck him in the arm when he had no serum handy; so he burned the poison out and carried ghastly scars under his shirt sleeve. Finally he went into his snake pit in Cape Town

to amuse a crowd one day when his native assistant was away ill. A small cobra bit him in the ankle, always a dangerous place because of the mass of small veins. Peers was treated, but on that occasion he did not recover. He had been bitten nine times before.

You may wonder why snake charmers do not always “milk” their snakes before handling them. The trouble is that the poison sac soon fills up again. It is a tiresome business, forcing the snake to strike at a piece of cloth again and again until the sac is empty. Of course the charmer can remove the fangs entirely, but this is seldom done by any man who takes a pride in his work. Such snakes become unhealthy and do not live long.

Mr. Desmond Fitzsimons, a South African authority on snakes and son of the famous F. W. Fitzsimons of Port

Elizabeth snake park, once saw what appeared to be an adder in a snake charming act. This was so unusual that he examined it closely. It turned out to be a harmless carpet snake, painted most realistically so that at a distance it looked exactly like a South African puffadder.

Then there was the witchdoctor of Sinoia in Southern Rhodesia who gained a great reputation for handling green mambas without fear. This man was fatally bitten during a performance. The district surgeon sent one of the snakes to Mr. Fitzsimons for identification, and it proved to be a bright green variety of the boomslang or tree snake. The boomslang is a back-fanged snake. That witchdoctor was unlucky, for the boomslang seldom succeeds in securing a grip with its teeth and killing anyone. But the

identification cleared up a mystery. No snake charmer, however skilful, could live through many performances with a mamba close to his flute.

Snake charming probably arose out of the snake worship of the ancients. Every temple had its snakes. Medicine men were also snake charmers, and to this day the badge of the medical profession is a snake. So it is not surprising to find that the Rifai, the most skilful snake charmers of Egypt, are religious men. They will clear your house of snakes, but it is part of the bargain that the snakes shall be taken out into the desert and set free. No doubt the snake charmers still possess secrets which have not yet been revealed to anyone outside their ranks.

CHAPTER 6

GYPSIES OF THE NILE

*Gypsy hair and devil's eyes,
Ever stealing, full of lies,
Yet always poor and never wise.*

ONE SUMMER night in Cairo I was on board a houseboat, a floating cabaret, with my friend Sharazad. A gypsy was giving the *danse du ventye*, which never bores a male audience. Gypsy girls have danced in Egypt through the centuries, and the well-rounded girl who appeared that night wore only a skirt and the bangles that blend with the music.

Standing before the orchestra, which now gave out oriental sounds, she moved in the strange rhythm of the dance. It was erotic and fascinating. Like a snake, I thought, a snake following the charmer's flute. She

held the audience by subtle movements. No footwork, nothing but that sinuous swaying, that remarkable control of the body muscles in time with the quivering music.

Sharazad, who interpreted so much Egyptian life for me, could always be relied upon to speak the truth when no personal motive was present. That night I was glad she was there, for she talked of the gypsies. "You like mysteries – there is a mystery," pointed out Sharazad. "Who are the gypsies? Look at that girl's face – the bold, dark slanting eyes, the high cheek-bones. She belongs to Egypt, and yet she is like the other gypsies all over the world. Where do the gypsies come from? They say this is their home, here on the banks of the Nile. But I would like to know how they can see into the future."

Sharazad believed in fortune-tellers, whereas I am sceptical. Nevertheless, she told me a tale that night which I confirmed later. If you do not accept coincidence as the explanation then you are, like Sharazad, a believer in fortune-tellers.

In the Mousky, the great bazaar quarter of Cairo, there lived during the 'eighties of last century a wise old gypsy woman who was known as the "Mother of Warnings". She charged high fees, and many famous tourists consulted her. Pranzini, a Levantine interpreter, led Sir William Gordon Cumming and Mr. Charles Inman Barnard to the old woman one day in 1882. "One of you three will lose his head," predicted the gypsy. "One will be a victim of injustice. The third man will live long."

Barnard, who was a celebrated Paris correspondent of the "New York Tribune", recalled the prophecy five years later when he saw Pranzini guillotined in Paris for murdering two women and a girl with a knife. After that came the Tranby Croft gambling scandal, which resulted in Gordon Cumming being compelled to resign his army commission. Barnard, the third man, also confirmed the truth of the gypsy's final prophecy, for he lived to ninety.

Gypsy simply means Egyptian, and other names such as Gitano, Faraon and Pharaon-Nephka all point to the land of the Nile. This is a mystery which still baffles ethnologists, historians and language experts. Cervantes called the gypsies "the kings of nature", and others have

said, accurately enough, that they are the spoilt children of nature.

One difference between the gypsies of Egypt and the million gypsies of other countries may be noted. In Europe and elsewhere the women observe a strict moral code, mating or marrying only within the gypsy clans. But in Egypt the unveiled gypsy girls, the Ghawazi or Ghagar as the fellahin call them, are as loose as any. Gypsy women ply their trade in the Wagh el-Birka. Husbands sell their wives, whereas in Europe an attempt to become familiar with a gypsy woman might be wiped out in blood.

Egyptian gypsies probably understand the world-wide Romany tongue of the race, but they prefer to speak a corrupt form of Arabic which no Arab can follow.

Hindustani and Persian words occur in their argot, but all that the scientists have been able to establish is that they have roamed widely over the face of the earth.

It has been suggested that the gypsies had their origin in North West India, where the Jats of the present day resemble the gypsies. However, there are very old manuscripts describing gypsy snake charmers and fortune-tellers in Egypt and the Holy Land. Some of the early gypsies may have migrated to India thousands of years before Christ and remained there long enough to absorb the Sanscrit tongue. Certain common gypsy words are undoubtedly of Indian origin – *pani* (water), *machi* (fish) and *bakra* (soup).

One legend declares that the gypsies are the descendants of Samer, the outcast who fashioned the Golden Calf

for the Israelites in the desert. Gypsies have always been metal-workers. Another legend states that the pagan forefathers of the gypsies were accursed for refusing a drink of water to the Virgin and Child when fleeing from the wrath of Herod. The story has also been handed down that the founder of the gypsy race forged the nails used at the Crucifixion.

When the gypsies first appeared in Europe they declared that they came from “Little Egypt” and that they must go to Rome to do penance for the sins of their ancestors. “I will scatter the Egyptians among the nations and will disperse them through the countries,” runs a Biblical reference which may have meant the gypsies. Bible students have also pointed out that the gypsies may have formed part of that “mixed multitude” who “went up also with the

Jews out of Egypt”. They may have wandered eastwards to India at that time, returning to Egypt later, while others spread out over Syria and Europe.

George Borrow, who knew the gypsies better than any other Englishman of his day, believed in the Egyptian origin of the gypsy race. That was the story told by the gypsies themselves, but they are a people who have lost their past. It goes back too far to be traced. The jugglers who performed before the early Pharaohs were gypsies. They were in India before the Hindus. It is hard indeed to say how these strange beings arose or why they inherited the restlessness which still drives them on and ever on, happiest when their faces are turned to the setting sun. One of the most careful modern historians of the gypsies

summed up in these words: "Nothing, indeed absolutely nothing is known of their racial origins. Religion might have given a clue, but the gypsy has not even a superstitious observance."

An old Spanish history of the gypsies stated that the tribe migrated to Spain from the coast of North Africa in the eighth century. They did not appear in Germany, however, until the early fifteenth century, when a tatterdemalion horde swept through countryside and cities led by men on horseback. They travelled fast, like the birds of prey that they were, and aroused both surprise and anger. Later on they were persecuted, tortured and hanged. Some said they were cannibals, which was untrue.

As petty thieves they are still a nuisance in some countries, tolerated only because of the breath of mystery

and spirit of gaiety which they bring into settled communities. The oldest account of the gypsies which I have read shows that they have not changed through the centuries: "They have neither house nor country; every place is the same to them. They roam about the land and abuse the people by their knaveries. It is thus that they deceive folk, robbing no one openly."

Gypsies and Jews are in no way related, but there are dramatic similarities in their wanderings and their persecution. Both had their exodus and became scattered all over the world. One great difference, of course, is that the idle gypsy is poor while many Jews have become rich. Gypsies are seldom tall. Most of them are swarthy, with that dense black hair which shows no grey until they reach an advanced age. The gypsies of Egypt

reveal their race at a glance. The women especially, with their brazen and flashing beauty, form a striking contrast with the Bedouins and the fellahin. They wear red bead necklaces or gold coins round their necks, and brass earrings. Often the women display blue tattoo marks, and there are tattoo artists among them. Tattooing is regarded as a form of magic, to ward off the evil eye. They have a drug or remedy which prevents tattoo punctures turning septic.

Newbolt, the English poet, declared that the most magnificent woman he saw in the East was a gypsy rope dancer at the Cairo palace of a nobleman. Some of the gypsies have beautiful eyes and all have sharp eyes. They seem to be gazing into the far distance as they speak to you, "a strange stare like nothing else in this

world," as Borrow said. Sir Richard Burton also wrote of the gypsy's eyes, the eyes that see through you, and beyond you. Burton's friends said that Burton himself possessed this trait to a marked degree: They suspected that he had gypsy blood.

When my dragoman took me to the Cairo camel market I realized at once that many of the red-fezzed rogues disposing of worn-out camels were gypsies. The tricks which have made gypsies everywhere notorious as horse-dealers are used here to disguise camels. Teeth are filled, arsenic brightens the eyes, obstinacy and other bad habits are cured for a time, lameness vanishes and the peculiar swaying walk becomes youthful again. Camels, horses or donkeys; the gypsy knows them all, doctors them with his secret remedies, and sells them with

all the persuasive gifts of his race. "O true believers, here is a noble steed that will bring fame to the owner!"

Desert gypsies of Egypt hunt the gazelle and the hare, observing their age-old rule, wherever they are, that "wild game has no master". Unfortunately they regard all forms of poultry as game. Working as a team they will invade a village, and the men will clear every hen-roost while the women tell their enchanting tales at the front door.

These people live in tents, travelling from fair to fair, and doing a great deal of small trade. A lower order resorts to begging, not without success. "Milk for the baby", cries the gypsy beggar, and who can resist such a plea? Russell Pasha, the famous Cairo police chief, once related that a gypsy girl tried to sell him her baby. He replied

promptly (in the language of Ghawazi gypsies) that he had enough children of his own. The gypsies were astounded when they found that Russell Pasha knew their language. He had studied the works of Von Kremer, a German orientalist who compiled a vocabulary among the gypsies of Egypt in the middle of last century. The gypsies Russell Pasha met were under the impression that their language was a secret, unintelligible to anyone outside their own circle.

Among the more respectable gypsy occupations are tinkering and basket-weaving. As coppersmiths they have few equals, and using only a little portable anvil and small hammer they will make almost any pot watertight. Master craftsmen have often been mystified by the gypsy technique. It is another of their

secrets. Who else but these vagabonds can hammer a penny piece into a handsome miniature kettle?

Male gypsies are often seen in strong man acts and as athletes, wrestlers and boxers. Gypsy musicians prefer the violin, though in Egypt their orchestras are a fascinating blend of eastern and western tune and rhythm. Cymbal, lute, flute and tambourine or xylophone – hear a gypsy orchestra in saraband or tzigane and you know where Liszt and Brahms found inspiration. They are masters of the ballad and the folk-song. Even the small children are taught by their mothers to strum the *kamanga*, the eastern zither, and beat the *taboor* drum.

Though the gypsy woman plays many parts, it is as a fortune-teller

that she reveals her gifts to the full. I have already quoted one example which I cannot explain. But I had a friend in the Cairo City Police, a detective who believed (as I do) that there is a reasonable answer to most riddles if you search long enough. He told me that some of the gypsy fortune-tellers made their reputations by the use of hypnotism. The client would be asked to concentrate on a black circle painted on the palm of the gypsy's hand. Soon the client would be under the influence and divulging all her secrets.

As a rule the gypsies rely on their skill in reading character. Those glittering eyes conceal a wealth of intuition. Wealth and love, trouble and danger; they know how to create mystery and conjure up the romance without which life would be dull.

Egypt is a great country for the fortune-teller. Egyptians like to know what the cards say before starting a new venture or marrying off a daughter. "Gezzaneh!" cries the gypsy woman. "Who wants to know the future? We show the good! We find the lost! Come and see your fortune!"

It is possible that playing cards had their origin among the gypsies. "Tarocks" cards used by them have special meanings, kept as a deep secret among the clans. But the Egyptian fortune-tellers also use sea-shells, which they hold to their ears to interpret the sounds.

Always there are believers. The gypsy talks guardedly at first, until she sees that she has made an impression and chanced upon some inner thought, some deep wish or important experience in the client's past. It is

trickery with enough truth to make it interesting. Some of the gypsy's prophecies must seem very like second sight when they are as dramatic as those given by the "Mother of Warnings".

Trickery enters into it when the gypsies leave their secret, traditional signs for the benefit of the fortune-tellers who will follow them. Thus the next gypsy often knows before she enters a house whether it is a home where husband and wife quarrel; where one or other partner is unfaithful; where there is a childless woman longing for a baby.

All over Egypt are those bushes hung with notched bones and other inconspicuous little fragments which show that a band of gypsies has passed that way. Every event in the life of the clan from birth to death, every significant detail of the neighbourhood, can be told

with the aid of sticks and pebbles at cross-roads and on campsites.

Someone once defined the gypsy religion as “faith in fortune telling”. I have pointed out that as a race they claim no religion; but many do profess to belong to the established church of the country in which they roam. Leland, a president of the Gypsy Lore Society, who knew them as well as any man of his day, said the gypsies were really the humble priests of the religion of all peasants and poor people – the “old faith” which amounts to witchcraft. Gypsies have indeed done more than anyone to spread among the masses a belief in fortune telling, magic and sympathetic cures, amulets and other small sorceries. Since prehistoric times the women have claimed occult powers.

In the crypt of a church in France there is the shrine of Saint Sara of Egypt, whom gypsies regard as their patron saint. But it is said that this church stands on the site of a place of pagan ceremonies. There are still fire worshippers among the gypsies.

Gypsies rank with the Benedictine monks as herbalists, though I would prefer to be treated by the monks.³ It is well known in Egypt that the gypsies can administer poisons which act only after several days, when the gypsies have passed on.

Seldom does the gypsy need a doctor himself. Weak children may not

³ It is worth noting, however, that the gypsy remedy for boils is a poultice of mouldy wheat straw. The mould would be the common penicillium from which Sir Alexander Fleming originally extracted penicillin.

survive the caravan life, but the others become hardy. You do not see many fat gypsies, which may account for the good health of the race. Though they love to camp beside running water they do not use much for washing; yet their well-known disregard for cleanliness does not seem to have ill-effects. As long as he is free to wander nothing harms him, and the only true rest he knows is movement.

The gypsy is a fatalist, and is content to go “when he has no more days”. But while he lives, this lazy barbarian regards himself as better than ordinary mortals. “He who has never lived like a gypsy does not know how to enjoy life as a gentleman,” runs an old saying, evidently of gypsy origin. And indeed they belong to the open road, hating all responsibilities, loving the lonely places under the stars, enjoying wine

and music, finding satisfaction in the sound of hooves by day and the camaraderie of their camp-fires by night. Their way of life is another gypsy secret, and no other way is good enough. They are poor, but they have more than a streak of poetry in them. It may be that they are the happiest people in the world.

I think they must be numbered among the children of Africa. Their own tradition claims Egypt as the country of their origin, and some are at home there to this day, a mystery to themselves and to all who meet them.

CHAPTER 7

NOBODY KNOWS THE SAHARA

*There were no jewels buried in
the sand,
The treasure that I sought was
little worth;
I went – but oh, how few will
understand –
To tread an unknown carpet of
the earth.*

G. F. FOLEY

“PEOPLE THINK they know the Sahara,” gasped Laperrine, the French general, as he lay dying of thirst. “Nobody knows it. I crossed it ten times, and at the eleventh it has me.”

Nobody knows the Sahara. That is why so many mysteries linger, so many legends flourish. It is a true desert, the largest on earth, more than three million square miles of dry, sand

ocean. Here you may bake an egg in a dune at two in the afternoon, and freeze it at two in the morning. Here are the hottest places in the world, places where a man without water will die in nineteen hours.

I knew men who died of thirst in that desert. The story is painful even now. I shall only recall the fact that has kept me wondering ever since the day when I saw the confidential signals that gave details of this tragedy. Twelve men were lost, all South Africans, and when they were found, eleven were dead. They had died fairly soon, all except one man who had gone without water for almost a week. “Survivor seriously ill,” was a sentence I remember. It was in early summer. To me, it was a miracle that one man survived.

In summer the Sahara is the least desirable place in the world. The heat scorches the eyeballs. When you fly it is bearable, though the vast and empty desert will make you shudder as no stretch of ocean can do. But from the air the desert is merely a glimpse of another world. In the aircraft you belong to the white cloud masses and the blue arch of heaven. That grey sand below is no more than a grim view framed in a window. If there are people down there, you say to yourself, they are people of a different planet.

Even when the pilot flies low it is unreal. Along the Nile there are villages like forts behind mud walls. You may observe boat-builders at work, the boats of past ages, and they are gone in a flash. For a space fields of sugarcane appear, and splashes of

red that are poppies. They have no more substance than the ancient cities, tombs and temples, here a necropolis and there a memorial. Through the whole vision runs a thread, a green thread bordering the great river. Yet even the Nile is a contemptible trickle from ten thousand feet.

Reality begins when you come in to land. The heat quivers and blinds you. It hurts so much that it must be real. How can people live in this furnace? I stayed long enough to learn how they lived.

Yes, the Sahara is a terrifying desert, but camels and men have been crossing it for two thousand years. These are the oldest trade caravan routes in the world. Camels were loaded with salt, sacks of salt in a land of thirst. With this commodity which took the place of money they made



Yes, the Sahara is a terrifying desert, but camels and men have been crossing it for two thousand years.

their way between the dunes from oasis to oasis. Salt, ivory and slaves. Those were three reasons why men risked their lives in the desert. When I think of the thousands upon thousands of skeletons of slaves and wretched eunuchs who were forced to make that journey, then I am not sorry that so many slave traders died of thirst.

Thousands of traders, many thousands of soldiers must have left their bones in this wilderness. Five hundred years before Christ a whole army vanished, the army sent to Siwa oasis by King Cambyzes. Early last century a caravan with two thousand men and about the same number of camels left Timbuktu for the Mediterranean coast. Not a man, not a camel survived.

Blind guides led the old camel caravans. Desert trails were redolent with the stench of camels. Sandstorms

might cover the tracks, but the odour remained; faint, but not too faint to be detected by the sensitive nostrils of a blind man who picked up sand by the handful and smelt every mile of his way across the desert. In a land with landmarks he was more useful than a man with eyes. Centuries before wireless telegraphy came to the Sahara, there were men in the great trading centres, Timbuktu and Kano, Cairo and Khartoum, who announced when a caravan would arrive. Even now, in the remote oases, there is usually a wise old man who will predict the day and the hour when new faces will be seen under the palms. It would be interesting to know whether these men are right often enough to place their forecasts beyond the possibility of coincidence.

Why did a party of Jews set out southwards across the Sahara early in

the Christian era? That they reached West Africa overland there is no doubt, for many tribes absorbed them and some of their Jewish customs may be traced in strange disguise to this day. But the story of the epic journey has been lost. Perhaps they had been in revolt against Roman domination and found their way over the burning sands to freedom of a sort. Round the oases for a long time there were Jewish colonies where the race remained pure. In the end, however, they were swallowed up. I looked hard at the tall copper-coloured members of the Fulani tribe when I was in Nigeria, for these intelligent people are said to have Jewish blood.

Once the Tuareg were the explorers and masters of the Sahara, those Moslems who had been Christians and who still carried the cross on their

saddles. They dug wells and collected tolls; but after the tenth century the Arabs defeated them. Arab caravans were enormous. One expedition of fifteen thousand camels might carry fifteen hundred tons of rice and millet and bitter kola nuts to Timbuktu, returning with gold and salt. A special expedition of twelve thousands camels went every year from Cairo to the mining centre of Takkeda to load copper ingots.

In the fourteenth century Mansa Musa, King of the Mandingo of Mali, headed a magnificent Sahara cavalcade which crossed the desert all the way from West Africa to Cairo and went on to Mecca. This potentate rode on horse-back. His slaves, five hundred of them, carried bars of gold worth millions of pounds. Mansa. Musa completed the journey safely in both directions, but

there were many who did not. Hence the countless treasure legends of the Sahara. Some of the old “books of treasure” (which Egyptian astrologers will gladly sell you) deal with the treasures of King Cambyses. I have already mentioned his army, which set out to destroy the oracle of Jupiter Ammon at Siwa and perished miserably of thirst. Cambyses conquered Egypt in spite of that setback. He worked emerald pits and copper, and the nuggets from his Sahara gold mine were said to be as large as melons. Yet in spite of the aid of astrologers, this wealth has never been rediscovered.

A famous Arabic manuscript, known as the “Book of Hidden Pearls”, compiled by an unknown writer in the fifteenth century, gives details of four hundred alleged treasure sites in the desert.

Archaeologists have been cursing the author of this work for more than half a century. It was in 1907 that a French translation appeared in Cairo; and many of the clues led to various ancient monuments. Irreparable damage was done by vandals searching for treasure at famous sites.

Often enough the treasure-seekers have been the sufferers. As recently as 1922, three men named Hamer, Rusek and Fockler were carrying out some mysterious mission in the Libyan desert when the Senussi tribesmen captured them. Fockler and Hamer were tortured by the women, then put to death. Rusek escaped to Dendera oasis more dead than alive, branded with red-hot irons.

Another ill-fated expedition was organized by Erich Baumgartner, a German who had fought under

Rommel. He returned to Egypt after World War II. For some years he worked in a shipping office, saved his money and bought a mine detector, dynamite and motor-vehicles. In 1952 he set out along the trail made in 1874 by his fellow countryman Rohlfs, in the belief that Rohlfs had found the mines of King Cambyses.

Baumgartner located something, according to his labourers, but they would not help him in the excavation because they thought he was revealing an ancient temple with a *djinn* or evil spirit guarding the place. Baumgartner then used dynamite. Too much dynamite. A huge dune caved in, and he was buried.

I doubt whether a “lost oasis” of any importance still remains to be discovered in the Sahara, though the last of them were only located and mapped

between the two world wars. Legends arose in all sorts of ways. Keen observers watched the line of flight of palm doves and crows, and knew they had come from some unknown source of water.

One explorer took compass bearings of doves approaching his oasis from the unknown dovecot. He shot a number of doves and cut them open. All had been eating olives. This ingenious man then trapped a number of doves and fed them on olives, killing them one by one, hour after hour, until he found that the olives in their stomachs had reached the same stage of digestion as the doves he had shot. Now the speed of a dove is twenty-five miles an hour, and according to his estimate the doves from the desert had eaten their olives nine hours before he had shot them. He set out from his oasis in the direction



I doubt whether a lost oasis of any importance still remains to be discovered in the Sahara though the last of them was located and mapped between the two wars.

shown by his compass bearing and rode by camel for about two hundred and twenty-five miles. Then he was rewarded by the spectacle of an unknown oasis with olive trees.

Kufra oasis, visited by white people for the first time in 1921, was discovered by an observant Bedouin who lived at El Obayad oasis far to the north. He watched a crow that flew to the south and returned at regular intervals. On the strength of this clue alone the Bedouin set out boldly and came at last to the date palms and water at Kufra. This was a discovery of the utmost value, food and water in the heart of the eastern Sahara; not only a life-saving outpost for caravans but a Garden of Eden where a large settlement could be established. A new oasis is a treasure indeed.

Many caravans perished in the Kufra region before the oasis was discovered. In the dune world you move between high ridges of sand. If an oasis lies on the far side of a dune, a land expedition will never find it though it may be only a few hundred yards away. Those men I knew who died of thirst were within sixty miles of an oasis. Close to them was a water-hole. One ground search party missed them by a mile. The dunes hid those dying men.

Most famous of all the Libyan oasis legends is Zerzura, "the place of the little birds". One expedition after another has gone out in search of this place. Members of the exclusive Zerzura Club (limited to those who had taken part in searches) used to dine together in London and discuss the elusive oasis. Zerzura has been indexed again and again, year after year, in the

Royal Geographical Society's journal. But this mystery was solved at last.

Zerzura, romantic name, first appeared in an Arab manuscript seven hundred years ago. The troublesome "Book of Hidden Pearls", which I have dealt with, also described Zerzura in most alluring terms. I quote an extract: "From this last wadi starts a road which will lead you to the city of Zerzura, of which you will find the door closed. This city is white like a pigeon, and on the door of it is carved a bird. Take with your hand the key in the beak of the bird, then open the door of the city. Enter, and there you will find great riches, also the king and queen sleeping in their castle. Do not approach them, but take the treasure."

It was a less fabulous Zerzura that Sir Gardiner Wilkinson described early last century. He had heard of an "Oasis of

the Blacks" which had gained its name because the oases to the west of the Nile had been invaded by black men from some unknown place. The blacks kidnapped a number of people and carried them away into the desert. Wilkinson, a reliable writer, suggested that the "Oasis of the Blacks" might be Zerzura.

At the time of the caravan trade between French Equatorial Africa and Egypt via Kufra there were persistent reports of Arabs who had lost their way and come suddenly upon a wonderful oasis with a golden minaret rising above the palms and a lake of sparkling water. But the desert so notorious for its mirages seemed to have tricked them. They never found their way back.

Mr. Harding King, an explorer who travelled west from Dakhla oasis in the

first decade of this century, heard many stories of Zerzura. He was told that mysterious black men had again arrived at Dakhla out of the sand. King also met two Bedouins who declared they had seen a large oasis with palms and ruins in a position where the map was blank.

For years it seemed that the masses of drift sand which had encroached on Dakhla had covered Zerzura. The drift of the dunes might lay the lost oasis bare again, but no one could say when it might reappear. Then, in the summer of 1932, a young air explorer named Sir Robert Clayton-EastClayton set out with cars and a light aeroplane to locate Zerzura. The airmen saw and photographed a wide valley with green acacia trees. Terrific heat and water shortage made a landing too risky, and further exploration was postponed

until the winter. Sir Robert Clayton-EastClayton died as a result of a germ picked up in the desert. That was the end of the venture.

Nevertheless, two members of the air expedition reached the unmapped valley by land some time later. One of them, P. A. Clayton, found a second valley to the east; the other, Count Almasy⁴, a member of the Royal Geographical Society of Egypt, discovered a third valley to the west. Almasy met an old Arab during this expedition, an Arab who had lived for many years at Kufra, and who knew the desert as well as any man living.

⁴ Ladislav Almásy served under Rommel in World War II and made several journeys behind the British lines. Once he delivered two German secret agents near Asyut. He returned safely, but the spies were captured in Cairo. Almásy died in 1951.

This man assured Count Almasy that the valleys seen from the air and later visited were, in fact, known to the Kufra people as Wadi Zerzura. The old man declared: "There are mountain sheep and foxes and many small birds in the valleys, and because of the birds it was called Wadi Zerzura."

Major (later Brigadier) R. A. Bagnold, one of the most skilful and determined Libyan explorers, president of the Zerzura Club, then decided that the wadis (now marked on large-scale maps in the Gifl Kebir) were identical with the oasis of the Zerzura legend. But he pointed out that the origin of the name Zerzura was still obscure, because it cropped up in Arab writings many centuries before the place was discovered by an Arab. "I shall continue to think that Zerzura is one of the many names that have been

given to the many fabulous cities which the mystery of the great North African desert has for ages created in the minds of those to whom it was hardly accessible," summed up Bagnold.

Everyone who has flown over the African deserts at not too great a height must remember the multitude of wheel tracks which mark the surface. Those which seem to branch off into the unknown are the most fascinating. I made tracks in the Western Desert myself seventeen or eighteen years ago, and although it would be impossible to identify them, I like to think that some are still there. In that rainless land, tracks may last for more than a hundred years.

Mr. Carter Wilson, a high official in Egypt early this century, traced the

tracks of Napoleon's vehicles, made in 1798 during the journey from Salhuja to Kantara. Russell Pasha, in 1909, found the wheel-tracks of the guns used in 1882 at the battle of Tel el-Kebir. Motor-cars were first used in the Western Desert against the Senussi during World War I, and the tracks of their narrow tyres may still be traced in far places. The expert can point to the caterpillars used by Prince Kemal el Din and the six-wheelers of Prince Omar Toussoon, desert explorers of the nineteen-twenties. Almost every halt, every struggle with the sand, every old camping-place can be pointed out by the Bedouin tracker. If it is a recent camel trail, of course, he will show you where the men slept and prayed at sunrise, where the camels trotted or walked.

I have seen the marks of motor journeys of long ago not only in the Sahara but also in the South West African deserts, the coastal Namib and the red Kalahari. But I believe the North African deserts hold the records of human invaders very much longer.

Desert travellers also leave bottles as signs of their progress across the empty wastes. Along many Saharan routes the bottles shine up at the airman; and one motor route to the south of Tangier (from Reggan to lonely Bidon Cinq and beyond) is so well littered with bottles thrown out of 'buses that no sign-posts are necessary. But the most dramatic bottle in the Sahara, I think, was one left by Rohlf in a cairn far to the south of Siwa. Prince Kemal el Din found it

in 1922, and read the message: "Will ever man's foot tread this place again?"

Geologists have never been able to explain the sand ocean of the Sahara. They thought at one time that the land must have been under the sea, but this theory has been abandoned. Once the Sahara was a paradise. Lost cities flowed with water, dead cities teemed with people. Elephants satisfied their enormous appetites. It was drying up five thousand years ago, but there were still open grasslands and bush and life.

Rivers dried up into pools. Animals gathered round the oases and became isolated; antelope and gazelle, jackal and fox, ostrich and quail, duck and flamingo. Once they had roamed at will. Now only the birds were free to cover long distances over the waterless desert.

Expeditions have found abundant proof of the ancient, moist Sahara. Far from the oases, where no man dwells today, they have copied rock paintings in red and white of haltered, domestic cattle. They have opened stone grave cairns and examined skeletons wearing strings of turquoise and ostrich-shell beads. They have brought back polished stone axes, querns and grinders. It is clear that large settlements once existed there. Grinding-stones suggest that crops were grown where only the sand blows now. What manner of men were these who hunted in the Sahara paradise? Who were the artists of the rocks? These are mysteries, too, though it is thought that an early negro race may have inhabited the Sahara long before the coming of the Berbers and the Arabs.

So the Sahara has its contrasts. Animals such as crocodiles once lived there. Catfish survive at the oases and Barbary sheep in the mountain ranges; relics of a very different climate. And there is the sand, the mysterious sand which swamped the old paradise. Sand is the great and lasting impression formed by the Libyan desert traveller, for there the sand is widest and deepest. Howard Carter had to remove a quarter of a million tons of sand to reach Tutankhamen's tomb, yet that was only a grain compared with the Libyan sand ocean.

Sand can be a frightening spectacle. Line after line of enormous yellow dunes run parallel, a mile or two apart, each dune thirty miles or more long, and some two hundred feet high. The dunes I crossed by car in the Kalahari were midgets beside

these Libyan giants. And in the Libyan sand ocean, away from the oases, there are no animals, no plants. Such is the dead world that still baffles the geologists.

Only the Senussi are really at home here. This Bedouin religious order was founded over a century ago by a descendant of the Prophet Mohammed. The Senussi were the old slave-dealers of the Sahara; they fought against British and South African troops in World War I and aided the Long Range Desert Group in World War II. These austere people will not touch alcohol, tobacco or coffee, but they love tea. I remember the Senussi mainly because I often exchanged army tea with them in the Western Desert for fresh eggs. But I have another Senussi memory, an



My camp near Tobruk was on the edge of a wretched patch of grain sown by Senussi. One day, before the spars crop was ready for cutting, the Senussi appeared with long knives ...

experience which is still a mystery to me.

My camp near Tobruk was on the edge of a wretched patch of grain sown by the Senussi. It is unreasonable, I suppose, to expect grain to flourish in a desert; but here the Senussi had coaxed a small area of wheat or barley into life. (Some of you may identify the crop from the photograph in this book.) One day, before the sparse crop was ready for cutting, the Senussi appeared with long knives, reaped the lot, then folded their tents like the Arabs and silently stole away. They got to Alamein before I knew there was anything wrong. It seemed that the Senussi could sense the ebb and flow of the battle as soon, or sooner, than the rival generals.

However, this is all in keeping with their reputation. Senussi are credited by other Bedouins with occult powers, and the victim of a Senussi curse lives in fear of paralysis or death. This power is said to be used over animals as well, so that a flock of sheep straying into a wise old man's barley may never emerge alive. (Of course there are more ways of killing sheep than by cursing them.) Senussi hypnotists specialize in a queer sort of television act in which the subject is made to see events in his home town or oases hundreds of miles away.

Sayed El Mahdi, probably the most famous Senussi prophet of this century, was a benevolent wizard. He claimed to be able to sense disaster over the desert horizon. Many tales are told of relief parties which set out



Nobody knows the Sahara, and all round the oases are secrets buried in the sand ... I wonder whether I shall ever pass over that magic frontier again.

on Sayed's instructions and found caravans at their last gasp.

Senussi desert guides may or may not possess a sixth sense, but they never forget a landmark. Changes of direction do not bewilder them, for each guide seems to carry a compass in his brain. And he can lead the way with confidence on a night without stars and in unknown surroundings. No one knows the Sahara, but the Senussi guide is seldom at a loss. Perhaps his secret lies in the instinct of the camels. It is said that a camel will always find its way back to an oasis where it has once grazed. Again and again a lost caravan has been saved by a camel suddenly taking the lead as though inspired.

Nobody knows the Sahara, and all round the oases are secrets buried in the sand. Here is Siwa, with its

houses of mud and salt built one above the other against the face of a huge rock; a human ant heap rising above the oracle that Alexander the Great consulted. Not far from Siwa are cities of the past still awaiting the spade of the archaeologist. Somewhere near the oasis are the lost emerald mines of the ancients. And for more than thirty centuries the palm groves of Siwa have been sending forth the finest dates in the world.

I wonder whether I shall ever pass over that magic frontier again at Mena, the narrow canal between the desert and the town. How thankful I was to come in out of the glaring yellow wastes, past the Pyramids, into the greenery of that luxurious suburb. And how gladly I would drive out now, away from Cairo, into

the desert again, the desert with its riddles, the desert nobody knows.

CHAPTER 8

LISTEN TO AFRICA

LISTEN TO Africa and you will hear the most baffling sounds on earth. All the African deserts I know, from Libya to the Kalahari and the Namib, have their mysterious noises. I have heard the “singing sands” of the Sahara, but I waited in vain at Luxor for Memnon to speak to me. Within a hundred miles of Cape Town I was more fortunate. There I heard the famous “Berg River concerto”, also known as the *snorkgeluid*, the snoring noise, or the *varkie*, the grunting of the pig.

Many theories have been advanced to explain these weird sounds, but not one of them has satisfied the scientists. You could understand the desert sounds if they occurred when the wind was blowing; but the mystery lies in the fact that the deep musical booming, the

rumbling and rattling and humming of the dunes may arise from the perfect calm after the wind has died. No wonder the Bedouins talk of the “spirits of the dunes”.

Sometimes you can detect a note like a cello in the elusive thunder of the sand. For minutes on end there may come the distant drone of an aero-engine; but you will search the sky in vain for that aircraft. Men far out in the sand ocean have been startled by a warning note like a ship’s siren. Brigadier R. A. Bagnold, who explored many far corners of the Egyptian deserts, was hundreds of miles from a village when the sands vibrated so loudly that he had to shout to his companions.

Some dunes must be beaten or kicked before they give out their sounds. Thrust a bottle into the sand and you can make it wail, or throb like an

organ. A plodding camel may produce queer effects. In certain places the powerful notes of an unseen harp emerge from the sand. Bells are heard in Egypt, tolling beneath the feet of desert travellers. The guides will tell you that a monastery once stood there, and the dunes covered the building and the bells. It is a romantic story, but the riddle of the sands has still to be solved. For the dunes may set the desert air quivering and reverberating, loud sounds may hammer at the drums of human ears when there is no sort of movement or breath of air to bring the grains of sand to life.

That fine irrigation engineer, the late Mr. A. D. Lewis, made a valiant attempt to solve the mystery of the “roaring sands” of the Kalahari. He examined the dunes on the farm Wit-sands, near the south-eastern border of

the desert, close to the Langeberg range. Here in an area of typical red Kalahari sand are the white dunes which Lewis described as “among the most remarkable in the world”. You can see them eighty miles away from an aeroplane on a clear day, covering an area of eight square miles, and rising about a hundred feet from the red plain.

Lewis could not imagine how this sand mass had been formed. He asked his assistant to run or slide down the slopes, and found that the “roar” could be heard six hundred yards away. Even a dog caused a rumble like thunder. Lewis noted that the roar was followed by a hum as long as the sand remained in motion. The more violent the push, the louder the roar. But it was possible to create a good volume of sound merely by moving the four fingers up and down in the sand. “It was exactly

like a man snoring in two notes with his inward and outward breath," recorded Lewis.

Musical notes were obtained with the aid of a plank and a series of tuning pitch pipes. Lewis had been informed that the sands would not sound when cold, but experiments at night and shortly before dawn proved that a loud roar could be produced.

Lewis first became interested in the roaring sands in 1908, when the place could be reached only on horseback. He took samples back to Cape Town with him, but discovered that the sand had become silent. Nearly thirty years later he re-visited the area, and took further samples to his Pretoria laboratory. This time he used closely-woven canvas bags with the mouths tied up; and such bags "roared" for weeks afterwards. Once the bags were opened

they lost their roar. It was the moist climate of Pretoria which was responsible, and when the sand was heated in an oven the roar was restored.

Lewis identified the sand as grains of quartz, nearly all of a uniform size. There was little fine material to retain whatever moisture there might be in the Kalahari, and thus the factor of dryness was essential in the production of the roar. He observed various electrical effects. At one time he surmised that the loss of the roaring quality might be due to loss of the electrical charge, but further experiments did not confirm this theory. Lewis failed to solve the mystery. In his summing up, however, he made this remark: "The possibility of electricity playing a part in the roar cannot be ignored,

but if it does then it must be the electricity generated by friction at or about the time of the production of the roar.”

Everyone who goes to Witsands is impressed by the sharp division between the white sand and the red. These two never mix. You find golden sand at one end of the great white dune, but even after high winds the white sand never streaks the red plain. The roaring is louder in summer. Griquas in the neighbourhood declare that an old, departed Griqua chief is trying to speak to his people.

Water is found easily in the *brulsand*, as the farmers call the “roaring dune”. Dig a hole eighteen inches deep, and there is clear water. Nowadays the great dune has many owners. Some have dug open wells,

each one an oasis with grass round the water. Thousands of head of cattle, small stock, horses and donkeys flourish in an area which would support little life without this wonderful natural reservoir in the “roaring dune”.

Another peculiarity of the white dune is the formation of fulgurites, which appear to be caused by flashes of lightning which fuse the sand on striking the ground. The result is a tube up to eight feet long, hard and hollow and twisted, and giving out a metallic clink. No one, however, has linked the fulgurites with the roaring sand. Fulgurites are always found in the white dune, never in the red sand. That is another secret the desert has not chosen to yield to science.

Along the Kalahari edge, especially in South West African territory, are

so-called “talking vleis”, little ponds left after the rare rains. Some gurgle and rumble, the strength of the sound ranging from a whisper or a moan to a shriek. A German officer was leading a patrol during the war against the Hottentots early this century when they approached one of these vleis at night and heard the low, inexplicable sounds. The native guide refused to march anywhere near the vlei. Shots were fired by the men of the patrol, but the noises went on after the last echo had died away. I believe the natives have reason to dread the “talking vleis”, for there are some where quicksands form during the rainy season. Tales are told of ox-wagons that were swallowed up with valuable cargoes. That may have happened, but I have

also heard of wagons being stolen and driven over the frontier.

Sea beaches sing and bark like the Sahara and Kalahari sands. Everyone who has walked along the Walvis Bay dunes must remember the chirping, twanging and bellowing of the sand along the coast. But the Berg River noise which I have mentioned is far more mysterious because it occurs only in summer, from December to late March, and only after sunset. Years ago I steered a motor cruiser into this river (with great difficulty because of the shallow entrance) and made fast near the old Velddrift pont. And when the sun went down, there was the outlandish grunting sound which has bewildered generations of people who have grown up on the banks of the Berg River.

They have gone out in rowing boats to trace the origin of the sound, and it has mocked them by coming up, apparently, from the water just below the boat. There is a certain rhythm about the sound as it rises and falls. Sometimes it is maddening, like hyenas in chorus; and people far down the coast near Saldanha have reported hearing it.

I said there were theories to account for all the singing sands of Africa. They are still no more than theories. One geologist suggested that the noises at Witsands might be caused by a hollow cavern of rock under the dune. When people walked on the dune, the cavern resounded like a drum. So they dug and bored into the great dune, but there was no cavern.

Lord Curzon, the English statesman, investigated these sand phenomena

in many places during his travels, and traced reports of them as far back as Marco Polo. He heard sand like a humming-top, sand like a tambourine, sand murmuring underfoot like a violin. Curzon also studied the reports of Dr. Oskar Lenz, who explored the Western Sahara eighty years ago. Lenz encountered a dune that gave out a long-drawn, hollow tone like a trumpet when the yellow quartz sand was heated under the sun. Curzon decided that the sliding sand caused friction, which produced the various deep, quivering, musical notes. Narrow valleys echoed the sound.

However, the sands of Africa speak when there is not a sign of movement. Is there water underground, moving and sounding as the surface temperature changes?

No doubt the rubbing of grain against grain plays a part in the mystery, but the explanation is incomplete.

It is possible that the Berg River sounds are due to “singing sands”, for there are many dunes in the area. Experts who have tried to solve the problem have gone so far as to examine the fish and frogs of the river; but nothing capable of making these sounds has come up in the nets. Lord Curzon also made a determined effort to solve the classic mystery sound of Africa, the so-called “cry of Memnon”. If you were ever at Luxor you must remember two fantastic statues rising fifty feet above the desert, about a mile from the west bank of the Nile. For three thousand years these Colossi of Memnon have baked in the sun. They are both

effigies of King Amenhotep of the eighteenth dynasty, enormous figures with mutilated faces seated on thrones which are mounted on pedestals. Poets have gone beyond their ordinary licence in describing these giants. You know the story, perhaps? One of the statues was reported to have uttered a sound on some days but not on others. As a rule the sound came at sunrise, a sound like the breaking of a harp-string. Oscar Wilde exaggerated the frequency when he wrote:

*Still from his chair of porphyry
gaunt Memnon strains his lidless
eyes
Across the empty land, and cries
each yellow morning unto thee.*

Tennyson was guilty of gross misrepresentation when he composed these lines:

*... from her lips, as morn from
Memnon, drew Rivers of
melodies.*

It is hard to say how often Memnon spoke. Distinguished visitors, when they heard anything, inscribed their experiences on the gigantic feet of the statue. According to the evidence, the sound was a single cry. That was sensational enough, coming from a statue. "Rivers of melodies" would have been frightening.

Was there a "cry of Memnon", and if so, what caused it? There must have been a sound of some kind, for Strabo the Greek historian and many others recorded it. A queer thing about the "cry" however, is that although the statue was built in 1500 B.C., the first description of the sound was given by Strabo in 20 B.C. It seems that the upper part of the eastern statue was

thrown down by an earthquake seven years before Strabo's visit, and in some queer way that disaster broke the silence. Only after the 'quake did the statue become vocal.

Strabo said the sound was like a slight blow. He was unable to decide whether it came from the Colossus, or from the pedestal, "or even from some of those who stood near the base". Thus the first observer raised a doubt about the "cry", a doubt which has persisted all through the centuries; a doubt which I felt myself when I remembered some of the Egyptian trickery of recent years. However, the weight of evidence is against deception, as you will discover. Traveller after traveller came and went, some gratified, others disappointed. Germanicus and other famous Romans heard the strange cry; Nero and

Juvenal and the Emperor Hadrian all stood before the battered statues at dawn, listening intently for the clear metallic sound that rang at sunrise (if they were fortunate) through the desert air.

Among the scores of Greek and Latin inscriptions on the statue, thirty-three refer to the “cry”. Two listeners claimed to have heard it before sunrise, and a few declared there were sounds later in the day. One visitor heard the “cry” twelve times in one morning. But sunrise was the great time, as a Greek poet said:

*Memnon awakes and cries
aloud,
Fired by the warmth of it.*

According to one old account, the sound was uttered when the sun touched the lips of the statue. That

romantic description does not ring true, and it is not confirmed by the weight of evidence. That the sun may have caused the “cry”, however, is a theory which cannot be ignored. After the year A.D. 196 there are no further inscriptions dealing with the “cry”. At some unknown period after that the statue was restored, and the work appears to have silenced the famous voice. It is true that the “cry” has been reported in fairly recent years; but it is doubtful whether those reports were accurate. Psychologists will tell you that if you expect to see or hear something, your imagination often fills the gap.

Sir Gardner Wilkinson, F.R.S., investigated the story on the spot towards the middle of last century, and published a theory which seemed plausible at the time. “In the lap of the

statue is a stone which, on being struck, emits a metallic sound that might still be made use of to deceive a visitor who was predisposed to believe its powers,” Wilkinson reported. “From its position, and the squared space cut in the block behind, as if to admit a person who might thus lie concealed from the most scrutinous observer in the plain below, it seems to have been used after the restoration of the statue; and another similar recess exists beneath the present site of this stone, which might have been intended for the same purpose when the statue was in its mutilated condition.”

Lord Curzon, who had a more scientific mind than Wilkinson (in spite of the F.R.S.) decided to inspect the statue for himself. With a step ladder and a foot-rule he demolished

Wilkinson’s theory. The stone mentioned by Wilkinson was there all right, but it had no sonorous quality and had obviously fallen there by accident and had become wedged in a crack. When struck with a hammer, it did not give out a sound like the snapping of a harp-string. The recesses Curzon found were not artificial, and no one could possibly have hidden there without being detected. So the renowned Wilkinson had made the facts fit his theory. His motive was probably one not unknown among scientists, one which I have mentioned before – personal aggrandizement. In that he was successful, for more than forty years passed before Lord Curzon exposed him.

Curzon refused to accept the idea that generations of priests had climbed the statue unobserved and deceived one

visitor after another (famous or otherwise), year after year, for no apparent reason. He thought the “cry” was due to some peculiar relation between the warmth of the rising sun and the great block of cracked and sundered stone. It might have been due to expansion in the stone when the temperature rose suddenly at dawn. Possibly it was caused by small fragments of stone splintering and breaking off in the heat of the new day; or there may have been a movement of one face of stone against another. Rocks do speak, and a strange cracking sound has been heard at dawn among the Karnak temples on the other side of the river.

I waited in vain for Memnon to speak to me, and realized that I had come too late. As I returned to the aircraft which had brought me to a scene where I

would have gladly lingered, I remembered another poet’s words:

*Memnon’s lyre has lost the
chord
That breathed the mystic tone.*

CHAPTER 9

FAIR PEOPLE WITH A DARK PAST

IF YOU delight in the mystery that remains a mystery, then you should have been with me in the Canary Islands. I went in search of the Guanches, people whose origin and language still form one of the great riddles of the human race.

You may say the Guanches have been extinct for centuries, but in the streets of Teneriffe my friends showed me the famous blondes among the dark *senoritas*, and in far corners of the islands someone who knew of my quest would remark suddenly: "Look – a proper Guanche". And there would be a fair-haired and blue-eyed person, utterly different from the Canarios of Spanish stock.

Probably you have sighted the seven Canary Islands with their peaks in the clouds. They lie within sight of the African coast, and they must have formed a constant temptation to adventurous colonists. Scientists agree that the Guanches settled there a long time ago. They were a tall, white people; women with rosy complexions, both sexes with the blond or red or brown hair that has come down through the centuries. Here in the islands where you would have expected to find Africans was a European race. Not merely white, but fine people with noble instincts. Every island was populated. Apart from local variations they looked alike and spoke dialects of the same language. They must have come by sea, yet *they had no boats*. Indeed, they were so ignorant of seamanship that they were horrified at

the idea of rowing or sailing to the other islands of the group.

Guanches could swim well, and one Spanish visitor of the fifteenth century reported that they swam nine miles from Lanzarote to the uninhabited isle of Graciosa. But that is no solution of the problem, for Fuerteventura and Lanzarote (the islands closest to Africa) are both nearly sixty miles from the mainland.

Romantic theorists have suggested that the peaks of the Canaries are among the last visible relics of the lost continent of Atlantis. By the same token, the Guanches were the shepherds of the Atlantean race, and they survived the disaster because they were on the high mountains with their flocks when the land sank beneath the ocean. Many other theories have been put forward, and I will come to them later.

Meanwhile I must discard the Atlantis story, even though I do so reluctantly. It is far too imaginative. Geologists have proved that the Canaries are not portions of a sunken continent, but volcanic peaks of the Tertiary period. Soundings between the Canaries and the African coast reveal such depths that if there was ever a "land bridge", it was swept away long before man appeared on earth.

Stone implements and other relics in the caves indicate that the islands were first occupied thousands of years ago. Only the most primitive boats were in use at that period, and the settlers could not have sailed from Europe in them. Probably many were drowned on the short crossing from the mainland.

Those daring early navigators the Carthaginians probably visited the islands. Greek and Roman writers

knew of them. Homer spoke of a colony there fourteen hundred years before Christ. Pliny gave a fairly accurate account of the islands, though he said they were situated at the end of the earth "where the ocean refuses to bear ships, where the sun sinks beneath the waves in the kingdom of the night". Then a deep hush closed in over the far islands for hundreds of years. Not until a French exploring vessel was lost there early in the fourteenth century did Europe rediscover the group.

Before long the Portuguese sent out expeditions which failed to conquer the Guanches; but they brought word of this fair race, some dressed in goat-skins, some naked. The raiders looted a village, noticed the fig trees and vegetable gardens, and carried off an idol. They also kidnapped four gay, handsome young men, who sang and

danced before they realized that they were prisoners.

These Portuguese were tough soldiers and sailors. Their descriptions of the naked maidens and the married women wearing aprons may be relied upon, but they do not help us to solve the Guanche riddle. Only when the French under Jean de Bethencourt set out to seize the Canary Islands do we form a clear picture of the inhabitants. For two scholars, intelligent and educated priests named Bontier and Le Verrier, accompanied the French invaders at the opening of the fifteenth century; and their descriptions form the only important first-hand evidence of the living Guanches and their language. Almost two centuries later a Spanish friar named Espinosa added valuable pages to the Guanche story; but in his

day the race was extinct as a pure race, or almost extinct.

Study these early writers and you will find that the Guanches were not all fair people. It is possible that other races arrived, by chance or design, at various periods and remained on the islands – Arabs and Semitic types, Carthaginians, pirates from Barbary, Moroccans and people of negroid stock. It was in Teneriffe that the purest Guanches were found.

Everyone agreed that the Guanches were an admirable race, though some of their principles were queer. They ranked as nobles, knights and peasants. They told the invaders that God had created man from earth and water; so many men, so many women; and that flocks of sheep had been given to sustain them. Afterwards, more men were created, but these had no flocks.

God said to them: “Serve those others and they will give you to eat.” Nobles did not marry the lower orders, and if there was no one the nobles could marry without staining the lineage, brothers were married to sisters. Some evidence suggests that the nobles were the blond element, the peasants dark.

Spaniards who took part later with the French in the long conquest regarded the Guanches as giants. No doubt many Guanches were above the average height of men in Spain, where stature is low to this day. The invaders noticed that the Guanches ran like horses, and leapt over deep ravines. Guanche women were brave and strong, and many an aggressive Frenchman or Spanish seducer was thrown over the cliffs.

Guanches made fire by rubbing wood. They ground corn in stone hand-mills

(a custom which has survived) and mixed the flour with milk and water to make the age-old *gofio* of the islands. Besides their sheep they had goats, pigs and dogs. They ate dogs and lizards. Butter, cheese and honey were other main items in their diet. They caught fish. The *conchevas* of the islands, huge mounds of shellfish, prove that mussels were eaten by the million. In the summer the Guanches climbed to their caves in the mountains, and they lived near the beaches in the mild winter.

“I swear to make everyone happy,” was the oath taken by the Guanche ruler of Teneriffe on ascending the throne. Until the French invasion, the Guanches were indeed a happy people.

Those old French priests must have been fascinated by the spectacle of a white race still living in the Stone Age.

Hatchets were made from obsidian, the dark volcanic rock. Guanches threw stones from slings. Metal tools were unknown. Dragon-trees provided shields. Crude pots were made without the wheel. Awls and needles came from the leg bones of goats. Wooden bowls and spoons have been found, while ladles, spear-heads and fish-hooks were fashioned from horn.

As the Guanches had no boats they had to fish from the shore with hook and line. Sometimes it was possible to swim out and drive a shoal into nets placed close to the shore. At night fish were lured inshore with torches and harpooned. Occasionally it was possible to catch fish by poisoning the water of small inlets with euphorbia juice.

Most of the Guanches lived in natural or artificial caves, but on Grand Canary they also built houses of stone blocks

without mortar. Roofs were made of pine rafters and rooms were panelled handsomely with polished boards. Houses on Fuerteventura had such narrow entrances that only one person could go in at a time. The two French priests, dealing with the Guanches of that island, declared: "The people are not very numerous, but are very tall and difficult to take alive. So formidable are they that if any one of them is taken by the Christians and turns upon them, they give him no quarter but kill him forthwith. They have villages in great number, and they live more closely together than is the custom in Lanzarote. They are well off for cheeses, which are superlatively good, made of the milk of goats. The inhabitants are of a resolute character, very firm in their

religion, and they have temples in which they offer their sacrifices."

Polyandry was a custom among the Guanches of Lanzarote. A woman might have three husbands, each one living with her for a month at a time. This system may have been common to all the islands in the early days of the settlement. However, it gives no clue to the origin of the Guanches, for it was not practiced in African territories near the Canary Islands.

Some of the Guanche laws would not have disgraced a modern, civilized nation. They were clean and honest. Murderers were banished, for there was no death penalty. "It belongs to God alone to take away that life which he gave," the Guanches told the priests.

On most of the islands the Guanches fought with such bravery that the gradual conquest was not complete until the fifteenth century had almost ended. Vivid stories of that cruel war come down to us. Nearly always the Guanches fought almost to the last man; and if any surrendered they did so for the sake of the women and children. After nearly eighty years of fighting on Grand Canary the Guanche army had been reduced from fourteen thousand warriors to six hundred. When they made their last stand, many of them leapt over a precipice to their deaths rather than surrender. They left fifteen hundred women and children. In the mountains of Teneriffe the war lasted until Christmas Day, 1495. Even then the Guanches would have

fought on if their army had not been decimated by a plague.

So the Guanches passed out as a pure race. Thousands were killed in action, many were sent away as slaves, all were robbed of their possessions, while the invaders took the women. Here was a Neolithic race which had learnt the arts of good government and happiness, which existed for almost a century even when attacked by men with firearms, and which left a riddle which cannot be solved on the available evidence.

You might imagine that rock inscriptions would provide a clue. Inscriptions are rare, however, and those which have been discovered may have been left, not by the Guanches but by early visiting explorers. One relic is known as the Anaga inscription. This small, pointed stone

was found in a natural pit at the northern end of Teneriffe. It has characters which seem to have been engraved with a metal tool. One archaeologist declared last century that the form of writing resembled that in use in the second and third centuries B.C. in Palestine, southern Spain, and the north of Africa, especially Carthage. He was unable to decipher it. Dr. E. A. Hooton of Harvard, one of the great Guanche students of this century, thought that Carthaginian and other navigators might have been responsible for this inscription and other alphabetic inscriptions found in Hierro, Teneriffe and Grand Canary. Hooton could find nothing to link the Anaga stone with the Guanches.

Hierro has more inscriptions than any other island, though the old inhabitants seem to have been the least advanced

in culture. Non-alphabetic scratchings consist of circles, ellipses and serpentine lines. They do not resemble any known form of writing. Professor Rene Verneau, who investigated these relics eighty years ago, thought the Guanches had no written language. He attributed certain alphabetic inscriptions in Hierro to Numidians from the neighbourhood of Carthage.

Hooton pointed out that little Hierro was often raided and the more docile people carried off as slaves. It was the westernmost island, on the very edge of the ancient world, just the place where explorers would disembark and leave their records. Here I must add a note of my own, for I have landed at Hierro and I can only wonder how the invaders succeeded in gaining a foothold and escaping with their captives. It is an island of precipices and should

have been easy to defend. No one has been able to decipher the Hierro inscriptions. The record of the rocks, which so often aids the scientist, only deepens the mystery of the Guanches. If only substantial traces of a written Guanche language could be discovered, the answer might be found. Some authorities say there was no such thing; others think the key may still be found in caves which have been hidden by landslides or not yet explored. Much remains to be done.

Those two French priests with Bethencourt, and later writers, have preserved a little of the Guanche language. They did not always explain which particular island dialect they were discussing; but it is on record that the different islanders had many words in common. *Aemon* meant water on several islands, *aho* meant milk,

chivato was the word they all used for a young goat, while *talons* were stone knives. Early French and Portuguese visitors would pick up a Guanche from the first island they touched at, and he would act as interpreter all through the group. Unfortunately the vocabulary is too meagre to allow a firm explanation to be put forward; but there are theories which I will include in the summing up.

Finally there are the clues provided by the mummies and skulls in the island museums. Las Palmas especially has a museum like a morgue. Legions of tourists have inspected the fair-haired Guanches there and gone away a little shocked, more than a little perplexed.

No one attempting to solve this mystery can complain of a shortage of mummies, though many have been carried away for purposes that were not

scientific. Seamen used to deal in mummies, for the powdered dust was in demand by quack doctors in England and elsewhere; and the mummies were also used by those who dealt in magical spells. One cave would often yield hundreds of mummies. The huge Guanche graveyard on the so called *Isleta*, close to the docks at Las Palmas, was ransacked late last century. Even in death the poor Guanches were treated without respect. Someone discovered that mummies burnt well, and thousands were used as fuel.⁵

If you study the mummies in the Las Palmas museum you cannot fail to notice the colour of the hair: yellow

hair, golden hair, fair red hair, dark brown hair but never the black Spanish hair. It has been suggested that this cannot be regarded as proof of the hair colours in life, as time and preservatives have a bleaching effect. Nevertheless, there is the plain evidence of early visitors that most of the Guanches were fair people, while some were more like blond Swedes than southerners.

Guanches mummies do speak plainly of some link with ancient Egypt. Three races mummified their dead, the Guanches, the Egyptians and the Incas of Peru. It would have been impossible for the Incas or any other South American race to have crossed the Atlantic against the trade winds in primitive craft to colonize the Canary Islands. There remains the Egyptian influence.

⁵ Compare this with the mummified cats of Egypt, which were used as fertilizer. (See Chapter 19.)

Many points of resemblance between Guanche and Egyptian embalming technique have been found. Both races drew out the intestines of noble people and left them in place when the corpses of the poor were being treated. I will spare you all the rest of the details. The burial of some mummies in pyramid form tombs in the islands may also be significant.

Skull measurements play a great and sometimes decisive part in the identification of races. Professor Verneau, a most conscientious scientist, found traces of various races among the large number of skulls he examined, but his main and dramatic conclusion was that the Guanches were descendants of the Cro-Magnon race.

Cro-Magnons, of course, were those rather superior people who succeeded the brutish Neanderthal man. Accord-

ing to Verneau, skull measurements of Cro-Magnons and Guanches reveal so many identical features that the relationship is plain. Guanche implements, too, resembled the stone tools of the Cro-Magnons.

Verneau declared that the Cro-Magnons moved southwards from France at the time of that great break in the story of man about two thousand years before Christ, when Neolithic man reached Europe. The disappearance of Cro-Magnon man is something of a mystery in itself; but Verneau thought he remained in Spain for a time, crossed to North Africa and migrated at last to the Canary Islands. Cro-Magnon man and the Guanches certainly had something in common. They were both tall with light skins and long skulls. Later research workers, however, have not confirmed Verne

au's findings. I have difficulty in accepting it because the Cro-Magnons were great painters of caves, whereas you do not find this form of primitive art in the islands. While I was in Las Palmas I went to Sensor Don Perez Naranjo for guidance. He had studied the Guanche relics all his life, but he shook his head. "During the sixteenth century a clever Italian engineer made drawings of the Guanches, and you will find them in our museum," Naranjo said. "There seems to be a resemblance between Cro-Magnon man and the Guanches, but it cannot be proved. It is an enigma still. I hope that one day, as a result of new discoveries, we will know more about the Guanche language, and then something may be revealed. But at the moment, if you make a list of the world's great mysteries, the Guanches will have to be

placed with the greatest mysteries of all."

I have touched on the Guanche language, the small vocabulary written down by the old priests and others. Island place names also preserve Guanche words – Taro, Tejada and Adeje, Anambro, Anaga, Galdar and many more. Marzagan on Grand Canary reminds the student of Marzagan near Agadir on the African mainland, and other identical names and similarities have been traced. Thus the Guanches have been linked with the Berbers; not the dark-haired modern Berbers but the fair Berbers who once lived in Southern Europe.

Excavations at Mersa Matruh, revealed a Berber culture reminiscent of that of Ancient Egypt. If the Guanches were of Berber origin, that would explain the

mummies. However, it must be confessed that the evidence is slender.

Dr. Hooton found many anomalies when he attempted to correlate the cultures, skulls and languages. Without being dogmatic, Hooton thought the islands were first colonized during the Neolithic period by a long-headed, dark, Mediterranean race with some negro blood. A second invasion occurred when the art of pottery was known in North Africa, and when barley was being cultivated. These were short, white people with broad faces and some Mongoloid features. About the same time came a third group, a tall, blond people from the Atlas ranges of Morocco and Algeria. They carried the main Guanche characteristics to the islands and dominated all the others. But as a result of intermarriage they created a

new type which (according to Hooton) was mistaken by Verneau for the Cro-Magnon type. Guanche culture arose from the fusion of all these races.

Hooton discerned a fourth invasion of the islands nearest to Africa at a time when bronze was in use in Eastern Mediterranean countries. They were dark-skinned, brown-haired people, and they were responsible for superior material culture, pottery and wheat-growing technique found on Grand Canary. Hooton also pointed out that some Arabs and Berbers must have reached the island in comparatively recent times, before the conquest.

Other scholars have suggested that some of the ancient islanders may have been Assyrians or Israelites. According to Pliny there was a mixed Berber-Arab race known as Canarii living in a forest beyond the Atlas

mountains; yet another faint clue which may or may not explain the mystery. One learned old professor, working backwards on an original theory, announced that the people of Ancient Egypt had crossed to Africa from the Canary Islands, bringing the embalming custom with them.

Sir Clements Markham, the English geographer, supported the theory that the Guanches were descendants of the ancient Iberian race which once covered Western Europe. They were tall, fair, strong people with many virtues and few vices. These people moved over from the Sahara to the islands before the desert was occupied by Arab and negro invaders. Markham worked out an ingenious origin of the name Guanche. He said the old name for the Guanche stronghold of Teneriffe was Chenerfe, while guan meant

“son of”; so you spoke of Guan Chenerfe, “son of Teneriffe”, and this was contracted to Guanche.

Carleton Coon, the modern American anthropologist, thinks the living Canary islanders have at least as much Guanche blood as they have Spanish. He was impressed by the Cro-Magnon theory, finding many islanders with the typical low, rectangular faces and deep-set eyes under heavy brow-ridges. Hermann, another modern writer on the migrations of mankind, was unable to fix the time of arrival of the Guanches on the islands, but considered it possible that they were an offshoot of the wave of Indo-European people who swamped Europe in the third century before Christ. Hermann also suggested that they might have been Goths or Vandals who were wrecked on the islands.

All that anyone can say with certainty is that the Canary group were populated at various times very long ago by people who had boats seaworthy enough to carry them and their small animals and possessions from the African mainland to the islands. Some were castaways, no doubt, but the main bodies of colonists must have set out on this adventure deliberately, or they would not have had their women and their sheep and other animals with them.

A mystery almost as great as the Guanche origin is the complete loss of all knowledge of seamanship by these island people. It is clear from the early manuscripts that the Guanches did not even make small boats or rafts for use close inshore. Yet their remote ancestors had reached Hierro, more than two hundred and sixty miles from

the African coast. Some say the people lacked the metals or hard stone needed for shaping the timber used in boats. Timber itself was plentiful. I find it hard to believe that such an intelligent race could fail to improvise tools. They made pine coffins for their mummies, they used wood for many purposes, and they could have made boats if they wished to do so.

Guanche sewing was beautifully done. They could have stretched hides round a wooden framework and designed coracles such as the Christian missionaries used in Caesar's day to cross from Ireland to Cornwall.

I am baffled. Search the world, and nowhere else will you find a group of islands where the old inhabitants did not fashion even a crude dug-out canoe.

Before this century is out, the origin of the Guanches may have been solved. Those mountainous islands have never been explored with the same care as the sands of Egypt, and many burial caves remain undiscovered. Often the Guanches left their dead hidden in precipices which could be tackled only by the most daring climbers. Royal mummies were hidden with special care. Someday the islands must give up the secret tombs of the Guanches, and then it may be possible to clear up this mystery. But the secret of a seafaring people who gave up the sea has been lost for ever.

CHAPTER 10

FIRE-WALKERS OF AFRICA

WHenever I hear tom-toms accompanied by reed pipes a scene of fire comes back to me down the years. It is the Umbilo temple outside Durban, and thousands are moving eagerly down the South Coast road. Some white people are there, but it is a bare-headed, black-haired Indian crowd, garlanded, robed in crimson and saffron and other brilliant colours. This is the day of the fire-walking ordeal.

Fire-walking was regarded by many until fairly recently as an occult performance. It is no longer a complete mystery, as you will see. I have watched this ancient ritual at both ends of Africa, in Cairo and Durban and Cape Town. They say the technique is easily acquired, but in this matter I have not the courage of my convictions

and I shall not risk my feet on the hot embers.

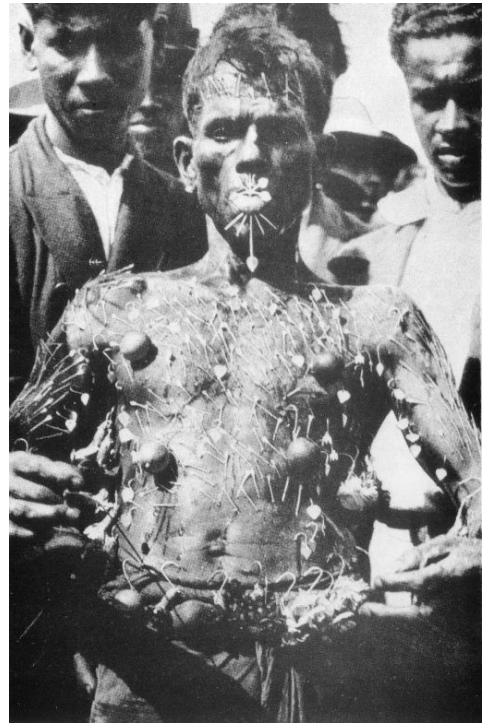
Toms-toms and reed pipes, incense and jasmine ... the crowd had gathered round the fire pit now. Six tons of wood have gone into the blaze. It has been spread out over the pit fourteen feet long and ten feet wide; a fierce pit which hurts your face and eyes when you approach the rope barrier thirty feet away.

Strange effigies are borne aloft by devout Hindus following their priests. I can see the supreme being Brahma, with his manifestations Vishnu and Siva. There are village goddesses, too; Annamma, the presiding deity, Chandasveramma, Mayesveramma, Maramma the yellow clad goddess of cholera, Udamma the goddess of swollen necks, Kokkamma the goddess of coughs and Sukhajamma the

goddess of smallpox and measles. There is a short puja, a saying of prayers by the priests.

Now the tempo of the drums and pipes becomes faster, the crowd roars, the fire-walkers are coming. One is an elderly man with white beard and hair. Several of the younger men have steel skewers through their tongues, and their chests are pierced by dozens, by scores of silver hooks; and on some of the hooks small limes are hanging. It looks like torture, but the most of the Soutris, the Hindu fire-walkers, show neither pain nor fear. One man is moaning. He has chosen to walk on nails driven upwards through the soles of his wooden sandals, and for him the fire will come as a relief.

The music rises and falls as the fire-walkers circle the pit. Then the oldest man leads the way over the carpet of



Several of the younger men have steel skewers through their tongues, and their chests are pierced by dozens, by scores of silver hooks; and on some of the hooks small limes are hanging.

fire, glowing in the breeze. All follow without hesitation. Some make the journey twice. One man passes over the whole fourteen feet of the pit three times. Then a woman with snow-white hair saunters across the pit.

Durban's chief of police and two white doctors are present. Carefully they examine the feet of the Soutris. Not a burn, not a blister this year. And not a drop of blood where the skewers and hooks pass through the flesh. But it is not always like this. Devotees have died or suffered painful burns in the flames while others have emerged untouched.

Fire-walking must be almost as old as sun worship in Egypt. My dragoman Ahmet, a good dragoman who knew my liking for the odd, strange and marvellous, took me to the Mousky in

Cairo one day to see a performance by a marabout.

It was the season known to Egyptians as the "Scent of the Breeze", that sweltering period which corresponds with spring in more favoured lands. Spring, heralded by the burning *khamseen* wind from the southern desert, and sandstorms that filled Cairo with fine dust. Spring, with a rising temperature and breathless nights. Spring that brought a dryness which made the nose tingle and irritated the skin. I could not imagine a more inopportune time for a display with fire; but I went.

It was a street performance. The marabout was a Moslem, an elderly giant in a turban and long blue linen *galabiyeh*. Before him was a large brazier, which a boy was stoking with twigs and tending with bellows. At one

side were the musicians with flutes and drums. "Al-lah! Al-lah! Al-lah!" chanted the marabout as he swayed to the orchestra and hypnotized himself for the show.

At last he threw off the *galabiyeh*, and I saw the scars of a lifetime of self-inflicted punishment. His eyes were glazed and he groaned as he stepped up to the brazier. Suddenly he seized fragments of burning wood in both hands and beat his huge, lacerated body from neck to waist.

"He is a holy man who has been many times to Mecca," my dragoman explained. "Such a man feels no pain."

The boy heated an iron rod in the brazier. It was white with heat when he raised it to the old marabout's face. And the marabout licked the rod. As a finale the boy tipped the brazier over,

and the marabout walked with bare feet among the glowing twigs.

"He has done well," summed up Ahmet the dragoman as I gave my piastres to the boy assistant. "Such a marabout is not to be seen every day. Wallahi! From Suez to Siwa you will not find such another holy man."

Ahmet told me that Moslems of both sects, the Sunni and the Shi, look upon fire-walking as a form of remorse for the deaths of old rival leaders killed during a conflict over the succession to the Caliphate. One of the leaders was Husain, a descendant of the Prophet Mohammed, and both sects mourn his death. Religious fire-walking ceremonies are always held as the climax of *Muharyam*, the mourning period during the first ten days of the Moslem year.

Fire-walking is not confined to Hindus and Moslems in Africa. It may be seen among primitive African tribes, such as the Wakimbu of Tanganyika. Wakimbu fire dancers will walk through fire, cover themselves with embers, rub their faces with blazing branches and bite pieces out of the glowing wood.

One of the Wakimbu witchdoctors went further than this. He placed his head in a small pit lined with red-hot stones, and kept it there for twenty minutes. White officials in Tanganyika watched this queer performance and timed him. The Wakimbus collect certain leaves of shrubs and trees before a performance, and chew them into a paste. They claim that this daiea, or magic medicine, when smeared over the body, protects them against fire. I wonder.

The fire-walker I watched in Cape Town was a white man who called himself Karas, the "white yogi". It was a genuine performance, with red-hot coals spread out on concrete in the garden of a Sea Point hotel. People sat round drinking beer. In the absence of the emotional atmosphere which is usual at these displays, the show did not seem at all impressive. An excited oriental crowd makes fire walking far more mysterious.

Nevertheless, this man sauntered over the live coals without going into a trance. His feet were examined, and they were neither protected nor blistered. Late in the evening a volunteer or accomplice came on the scene. Karas made passes as though hypnotising him, and the newcomer then walked along the fire-path without hurting himself. A little polite applause

followed, but I missed the tom-toms and reed-pipes.

I said there have been deaths and lesser casualties during fire-walking displays. Lieut.-Col. R. H. Elliot, the surgeon who studied various forms of magic, traced a number of inquests held on fire-walkers who had been fatally burnt.

Durban newspapers reported a serious accident during a Good Friday fire-walking ceremony a few years before World War II. The young Indian "penitent" fell when he was half way across a twenty-foot pit of white-hot ashes. Four men had already made the journey safely when this young man staggered and found himself on his hands and knees. It seemed that no one could help him. He crawled to the edge of the blaze, and then people reached out and dragged him into safety. They

laid him in a shallow trench of water at the end of the pit, and then he was taken to hospital with severe burns. Other fire-walkers told the newspapers that the man fell because he had come out of the ecstatic trance which protected him when he entered the pit.

Why do some escape and others suffer or die in this queer and ancient ordeal? No doubt there are chemical treatments which would confer some protection. Doctors and scientists have examined the feet of fire-walkers so often, however, and found no sign of treatment that this explanation can be ruled out. People with tender feet would probably be burnt, while those with hard skins would stand a better chance. But the secret of successful fire-walking must be sought elsewhere.

Is this another example of mind over matter? Only to a limited extent.



Hypnosis, religious ecstasy, supreme confidence – these states of mind will take the walker over the fire without hesitation or floundering, and that is essential.

Nervous people who are foolish enough to play with fire in this way are nearly always burnt. Hypnosis, religious ecstasy, supreme confidence – these states of mind will take the walker over the fire without hesitation or floundering, and that is essential.

Hindu fire-walkers in Natal will tell you that they follow a strict vegetarian diet for ten days before the fire-walking, and a system of prayer and pious thoughts, baths and special exercises. On the morning of the ordeal there is a long temple ceremony and total immersion in the nearest river. The ordeal is faced as a penance for some evil deed, or to carry out a vow made during illness or some crisis. A young Indian girl at Pietermaritzburg was afflicted with a painful stomach complaint. Someone told her that if she tested her faith three times in the fire

she might be cured. This she did at an Easter ceremony a few years ago. After a week in the temple, living on fruit and milk, she walked down the fire-path without a tremor. Her feet revealed no trace of burns. She claimed that her ailment had vanished completely.

Faith is essential. Some theorists have suggested that the fire-walker waits until an insulating layer of ash has formed before stepping on to the flaming pathway. This is not correct. Kuda Bux, a Kashmiri, demonstrated fire walking before a number of doctors and scientists in England some years ago. He brushed the ash away before his walk, and proved conclusively that he preferred the red embers of the log fire.

Kuda Bux walked fairly quickly. The fire-path was twenty-five feet



Hindu fire-walkers in Natal will tell you that they follow a strict vegetarian diet for ten days before the fire-walking.

long, three feet wide and twelve inches deep, about the average size used in India. Doctors found that Kuda Bux's feet were normal, with a fairly thick skin.

His feet were washed, swabs were taken and examined; and the medical committee was satisfied that no preparation or chemical had been used to render him immune from burns. After the final walk there was not a suspicion of a blister.

One curious point about Kuda Bux's demonstrations was that he wore a black cotton frock coat and his trousers came down to his ankles; yet his clothes were not scorched. It took him about sixteen seconds to traverse the embers on each occasion.

The late Dr. T. W. B. Osborn, the South African medical authority and

Member of Parliament, studied the Natal fire-walkers and came to the conclusion that there was no adequate physiological explanation. He pointed out that in fire-walking you have heat without blistering. A hypnotist could produce blistering without heat, by handing his subject a cold penny and telling him that it was red-hot. Thus it seemed that the fire-walker was in mental control of the situation. Possibly the sympathetic nervous system was in full activity owing to great excitement. At such times the blood vessels became constricted and the blood clotted more quickly, so that the danger of bleeding was minimized.

Dr. Osborn recalled the parallel feats of Indian yogis who were able to withstand great cold for long periods. These men sit naked on the ice of a frozen river for hours on end. Some of

them lived in caves among the Himalayan snows without fires, clothed only in loin cloths. Normal physiology could not survive such exposure. But in the East such feats were regarded as the natural fulfilment of a religious way of life.

Professor David Waterston of St. Andrews University attended a fire-walking demonstration in Fiji, arranged for members of the British Medical Association. The Fijians walked with bare feet upon stones heated to a temperature high enough to set paper alight. The professor suggested that by training and practice and repeated exposure of the soles to heat, the performers were able to endure without severe pain a temperature which the untrained person would find intolerable. In the same way children could become accustomed to walking

over sharp gravel. The threshold to pain had been raised.

Sir James Purves-Stewart, another medical delegate who witnessed the Fijian ceremony, disagreed with the professor. He thought the immunity to heat was brought about either by auto-suggestion by the performers themselves or hetero-suggestion by their native chief or priest. Religious ecstasy, he declared, was capable of temporarily banishing sensations of pain. Both these medical authorities were satisfied that the performers were not drugged, that their feet had not been treated, and that the soles of their feet were not abnormally tough.

So far there has been a grain of truth in many of the theories, but the whole truth has not yet emerged. I believe the man who discovered the secret of fire-walking was an American doctor of

philosophy named Mayne Reid Coe of Florida. By sheer chance Coe read a physics book published towards the end of last century and giving details of a forgotten discovery known as Leidenfrost's phenomena.

When liquids are thrown upon incandescent metal surfaces they present remarkable phenomena which were first observed by Leidenfrost. If a tolerably thick silver or platinum dish is heated to redness and a little water, previously warmed, is dropped on to the dish, the liquid does not spread itself out and moisten the dish as it would at ordinary temperature, but assumes the form of a flattened globule.

It rotates rapidly on the bottom of the dish. It does not boil. In fact, its evaporation is only about one-fiftieth as rapid as it would be if it boiled. Liquid

in the spheroidal state does not actually touch the red-hot surface on which it dances. It is kept away by an insulating cushion of its own vapour.

Coe tested Leidenfrost's phenomena in his own laboratory and confirmed the scientific principle involved. He had the courage of his convictions, for he walked barefoot on red-hot coals and metal plates. Coe, indeed, fortified by scientific knowledge, went so far as to place his tongue on a red-hot steel bar.

So that is the real secret of fire-walking. NO drugs. No hypnotism, though the walker must have sufficient confidence to follow a steady course. No anaesthesia, and no trickery. All that happens is that the feet sweat, and the spheroidal state of the moisture protects the feet from the flames. In just the same way, the fire-

eater is protected by the saliva in his mouth.

Now you know why Kuda Bux brushed the ash away and walked on red embers. If the embers are not hot enough the insulation breaks down and the walker is burnt.

Probably there are very few fire-walkers who are aware of the principle which gives them immunity. They do know, however, that a long walk is dangerous. Twenty feet is safe, and twenty-five feet is about the maximum. The point is that each foot is in contact with the embers for less than half a second, and each part of the moving foot touches the embers for a small fraction of a second. This brief contact is the fire-walker's salvation. The man who loses his nerve, stands for a second or turns back is lost.

Houdini used to put a man in an oven with a raw steak. The steak cooked, for it could not perspire. The man came out gladly, but unharmed, saved by the cooling effect of evaporation from the skin.

Watch a woman testing her iron with moist fingers and you have an everyday example of the fire-walker's magic. Water vapour between the hot iron and the skin prevents burning. Any plumber will provide a more daring example by directing a flow of molten lead with the moist palm of his hand.

So almost anyone can become a fire-walker. It is not a fake. The ability to walk on red-hot embers is not confined to fakirs. Wipe your hand with a damp cloth, dip it into molten lead and you will come to no harm as long

as the temperature of the liquid metal is greatly above its melting point.

They still hold fire-walking ceremonies in Natal, but the old Umbilo temple has been abandoned. It is a ruin, a place of weeds and snakes. But this temple looked down on great ordeals, year after year, when the fire-walkers gathered there unafraid.

One memorable day three young white girls threw off their shoes and followed the Indian fire-walkers over the glowing coals. Many people in the crowd screamed when they saw the girls on the fire-path. It seemed incredible that white girls should possess the faith and the nerve to venture into that red heat. Pipes and tom-toms played a weird tune for them that day. And all three girls came through the flames without a mark or blister, protected by their own boldness

and an obscure scientific principle that has eluded many qualified scientists.

CHAPTER 11

BURIED ALIVE

BETWEEN THE wars, when I was a reporter on a Cape Town newspaper, there was a genial news editor of fond memory who had a weakness for stories about funerals. No doubt he was right. A certain type of mind is unduly concerned with the trappings of death, and some readers loved these revelations.

Thus I found myself reluctantly interviewing undertakers and writing such grim headlines as: "How Long Do Coffins Last?" It did not seem to me to matter very much how long they lasted, but I discussed the relative merits of various timbers, and my friend the news editor was pleased. However, there came a day when I had to protest vigorously against one of these ghoulish assignments.

"Did you ever consider the possibility of being buried alive?" inquired the news editor with his cheerful smile.

I told him frankly that such a topic would only alarm the public, and was unsuitable for the columns of a family newspaper.

"Look into it," urged the news editor. "You may find that it is easier to be buried alive than you think."

I looked into it as in duty bound. Doctors and undertakers were all sure that such regrettable errors had never occurred within their experience. Now and again people had been known to sit up in their coffins, but there was no harm done. Often after the first shock their families were genuinely pleased to see them restored to life. The news editor rubbed his hands in delight when I gave him this information, but I was

still against publishing the story and I was supported by higher authority.

During this inquiry I came upon a mystery which I did not dare to mention to the news editor. It would only have aroused his enthusiasm to a higher pitch. In the office library I found an old file on the subject of premature burial, and it made me feel that I was becoming an unwilling authority on the subject. A number of items led up to the mystery which I shall relate in due course.

First of all there were cuttings describing Indian yogis who had allowed themselves to be buried alive. One named Yashpal had baffled doctors in Johannesburg by stopping his pulse beating. He remained locked in an "airtight" box for thirty minutes. Yashpal also gave a demonstration in Durban. He said that he was the son of

a rich landowner in India, and was touring the world to raise funds for the Vedic faith. There, too, he performed the Samadhi (breath control) ceremony. He had signed an indemnity form declaring that he was to be buried alive of his own free will and would hold himself responsible for the consequences.

Stepping into a grave which had been dug for him, Yashpal sat cross-legged on a carpet. Boards were placed over his head. Sacking was thrown over the boards, and earth a foot deep was shovelled on top and stamped down. It seemed that the air supply had been cut off. After fifteen minutes the earth was removed, Yashpal came out of his trance and walked away to a motor-car.

Other cuttings were more impressive. Fakirs had been buried for weeks at a time and had come up smiling. Doctors

testified to the pulse-beats becoming slower and slower until they died away completely, and the stethoscope revealed no heart action. One fakir was buried and corn was sown on the grave. It grew to a height of several inches before the man was dug up (none the worse, of course) forty-two days later.

It seemed from these accounts that it was possible for a human being to hibernate like a squirrel. Many of these burials of fakirs were watched by doctors, and details given in such papers as the "India Journal of Medical Science" appeared to be authentic. I suspected, however, that when the fakirs were buried for long periods they had some concealed air supply at their disposal.

Further study led me to well authenticated cases of extreme breath control in which it seemed that the fakir had lived

without breathing. When I was in Egypt I often heard of the exploits of Tahra Bey of Tanta, a fakir who allowed himself to be sealed in a lead coffin and lowered to the bottom of a swimming-bath for thirty minutes at a time. Certain dervishes in Egypt bury themselves in hot sand in the belief that this treatment cures various diseases. Healing processes, they say, set in during the complete repose.

Mr. Harry Price, who investigated so many psychic phenomena and abnormal happenings in Britain, visited Tunis just before World War I and helped to dig up a fakir who had been in a grave for ten days. Price was not present at the burial, but he was informed that the fakir had prepared for the ordeal by shutting himself up alone in the dark for one hundred hours. He had no food and only a little water.

After this period, assistants found him rigid as a board in a deep trance. His pulse was barely perceptible and his eyes were tightly closed.

They carried him to the grave on a litter. A party of American tourists and many other people watched the assistants plug the fakir's nostrils and ears with a substance like thick honey or wax mixed with cotton tow. A new white linen bag was drawn right over the fakir, tied and sealed with an American's signet ring. Boards were placed under and over the body in a pit five feet deep. The pit was filled with earth and stamped down. Guards were stationed there by day and by night.

Price noticed that when the man was taken from the pit the seal was intact. His limbs were rigid and shrivelled, and the face was bloodless and seemed to be that of a man of ninety. It was not

a pleasant sight. The teeth were clamped. The body was cold.

Doctors were present, and they informed Price that there were no signs of decay. Gallons of hot water were poured over the fakir. Everyone seemed to be desperately anxious to see the man come to life. Bran poultices were applied to the head and heart. The plugs were removed. After thirty minutes in the open air the fakir opened his eyes, and in an hour he had become normal.

Price made a number of inquiries about the technique followed, and decided the feat had been genuine. He thought that the fakir had taken some narcotic or alkaloid drug to deaden the nerve centres and induce the trance. Price was informed that it was necessary for the fakir to know exactly how long he would remain buried; then he could

survive the ordeal by the exercise of mind over matter. If he was not revived at the time previously agreed upon, he would die.

Besides the descriptions of fakirs there were many old reports of people who had been placed in coffins while in trances. "Death-trance, or that profound degree of lethargy which closely counterfeits death, deserves greater attention than is generally paid to it as a pathological condition as well as a possible cause of premature burial," wrote Dr. T. M. Madden of Edinburgh.

Towards the end of last century a diligent investigator named William Tebb, assisted by Colonel E. P. Vellum, M.D. of the United States Army, gathered a wealth of grim evidence from all over the world on premature burial. Their inquiries

ranged from noises in vaults in England to the Towers of Silence in Bombay and the Calcutta burning ghats.

They found that fainting fits, intense cold, influenza and narcotics might produce a state resembling death. During epidemics of smallpox and cholera, many people recovered consciousness after being placed with the dead. "Nothing is more uncertain than the so-called signs of death," declared Tebb and Vellum. "In all countries and in all ages, many persons supposed by physicians and relations to be dead have revived."

Among the discoveries made by Tebb and Vellum were authentic reports of men and women who had been revived after being hanged. They quoted the Boston "Medical and Surgical journal" for the details of a

man who was hanged at 10 a.m., cut down at 10.25 a.m. and placed on the operating table for the post mortem. At 11.30 a.m. four doctors listened to his heart beating. They exposed the heart, but it continued to beat, and there was still some movement five hours after the hanging. I was glad to note that the doctors were criticized later for “excess of scientific zeal”. Nevertheless, it does appear that they prevented a premature burial.

Two other victims of inefficient hangmen were women. One was revived with sal ammoniac. The other was observed to breathe in her coffin, and was revived. Unfortunately Tebb and Vellum failed to mention what happened to them.

I discovered in this same illuminating file a report from the Cape “Shipping and Mercantile Gazette” dated January

7, 1856. A woman aged one hundred and five, living in the Malmesbury district, had been placed in her coffin. Someone went to gaze upon the centenarian for the last time when a voice came from the coffin: “Doctor, please give me something to eat, for I am much exhausted.” She was given food and made a complete recovery. The newspaper stated that her doctor vouched for the facts.

Finally I found a note drawing attention to a “true story of burial alive in Cape Town”, published in the December 1898 issue of the “Cape Illustrated Magazine”.

I located the magazine in the South African Public Library, and this provided me with a mystery which still puzzles me. If there is someone who knows more about it than I am

able to give here, I shall be pleased to hear from him.

“Buried Alive” was the heading, and the author used the pen name of Beta, the second letter of the Greek alphabet. “Marvellous as this narrative may appear, it is nevertheless quite true,” Beta declared. “Some of the descendants of the lady are still living in Cape Town.” From the style, I guessed that Beta was a woman. I traced a number of articles which she contributed to the “Cape Illustrated Magazine” during the last decade of last century. They dealt with Bushmen, customs of the Korannas, Hottentot customs, a visit to Letherodi and other serious historical subjects, often with a religious flavour. Beta also published a slender little booklet called “Attractive South African Stories”, printed by the Citadel Press,

Loop Street, Cape Town, in 1901, priced sixpence. Mendelssohn the bibliographer described this work as “a collection of tales mostly having a religious tendency, many of which are stated to be true experiences”. Beta had chapters on the Doppers, the rescue of a missionary from savages, Bushman paintings in the Clanwilliam district, the power of prayer and other subjects. In a foreword she stated: “In placing this booklet before the public we feel that we are doing something to counteract the poison imbibed by so many, especially the young of both sexes, in reading those ‘Penny Dreadfuls’.”

Beta was obviously a sincere writer, and certainly no romancer or lover of sensationalism. I found it necessary to form some estimate of Beta’s character in order to assess the value of her

story “Buried Alive”. But I have never been able to discover the identity of Beta.

Beta’s narrative opened with a young wife who had been weak with illness and bedridden for many months. The doctor admitted that he could do no more, and that she would die. She fainted one day, and though restoratives were applied she remained in a state of coma – conscious, but unable to move a muscle. At last she heard the people at the bedside saying that she was dead.

The woman was startled, but could not raise her eyelids. She heard sobs and felt her husband’s tears drop on her face as he kissed her. A little later she realized that her body was being prepared for the grave.

“Surely the good God will preserve me from being buried alive,” she thought; and she prayed to avert the danger. She heard someone saying: “Poor thing, she will have to be buried tomorrow.” The door and shutters of the room were closed.

She gathered later that someone was measuring her for a coffin. That evening several people came in and the coffin was placed on the floor. She recognized her husband’s voice and felt his parting kiss. Then the undertaker asked her husband whether the wedding-ring should be removed. It was too tight, and they left it on her finger. She was lifted into the coffin, too weak to raise a hand.

Some hours passed in silence, and then she heard a service in progress. She could recognize the clergyman’s voice, and understood every word of

his address. A familiar hymn was sung. She felt sorry for her husband, who would have to go on alone. Though they had no children, they had lived happily together.

After the service relatives and friends entered the room, and again she felt tears on her face and heard her husband saying: "Good-bye, darling. Good night, good night, until we meet in the bright morning."

She wished to open her eyes and say: "I am not dead." But still she was unable to move. Then the lid of the coffin was screwed down and she felt the pure air excluded. "Ah, it has really come to this – I am to be buried alive," she thought. Bearers lifted the coffin on to the hearse and she felt the movement as they drove to the cemetery.

The coffin was placed in the family vault. Hours passed. Then to her surprise she felt the coffin being moved and placed on the gravel path just outside the vault. The lid was unscrewed and removed, and the fresh air on her face revived her.

Very soon she understood by the conversation and jokes that the men who had removed the coffin were criminals. One of them held up her hand with the ring and remarked: "What a fine ring! We ought to get a good price for it." He tried to remove the ring and swore when he failed. Then he took a knife and she felt the deep cut. Blood flowed, and she sat up. The robbers yelled in terror and fled.

The young wife climbed out of the coffin and staggered home on her bare feet. "It was as if superhuman

strength had been given me,” she declared afterwards. When she reached the front door in the early hours of the morning she heard voices in the parlour and gathered that her husband was talking to a sympathetic friend. He said later that he was so filled with sorrow that he could not have slept.

She knocked and heard her husband remark: “If my poor wife were not dead I should say that was her knock.” He came to the door, and before he opened it the wife said: “Do not be afraid my dear – it is your wife’s knock. I was buried, but they have opened the coffin again and I have come home.”

She heard him call on God in amazement, but he opened the door at once and stared dumbfounded at the figure in white clothes, stained

with blood from the injured finger. Then he took her in his arms, carried her to the bedroom and sent for the doctor.

Beta ended this extraordinary story with a statement that the wife became rapidly stronger. In a few weeks she was up again and restored to health. She became the mother of several healthy children.

That was the end of Beta’s “true story”. Perhaps someone who knew Beta, or the woman who listened to her own burial service, will tell me whether it was all false or true.

Let me add that the chances of being buried alive are too small to be worth serious consideration. Such conditions as trance and catalepsy may bulk large in the fears of some people, but in reality they are very rare. Moreover, it

is open to anyone to ensure that premature burial does not befall him either by directing that a doctor shall open a blood vessel or that he shall be cremated.

CHAPTER 12

GIANTS PAST AND PRESENT

*A form enormous; far unlike the
race
Of human birth, in stature or in
face
As some lone mountain's monstrous
growth he stood.*

HOMER

LONG AGO a giant entered the Cape Town newspaper office where I was working. He licked a postage stamp, reached up, stuck it on the wall near the ceiling, and left it there in memory of his visit.

He was the tallest white man I ever met in Africa, but for some reason I forgot all about him. Years later he returned, pointed to the postage stamp, pulled it down and handed it to me. Dinny Duffy was his name. I only wish that I

could remember his height. It must have been almost nine feet, and he made an easy living by exhibiting himself. I believe a Russian, nine feet three inches in height, was the tallest man of authentic record; though in recent years I heard of a man of nine feet ten inches.

Some scientists assert that there were even more impressive giants in the dawn world. They support those lines in Genesis, so often quoted, which declare: "There were giants in the earth in those days; and also after that when the sons of God came in unto the daughters of men and they bore children to them, the same became mighty men ..."

Professor Franz Weidenreich of the American Museum of Natural History is a leading exponent of the giant theory, and he regards Africa as one of

the homes of the giants in “those days” – half a million years or more before Christ. Other anthropologists still think that the first human beings were pygmies, basing their view on the evolution of small mammals (like the horse tribe) which grew larger. Weidenreich studied various skulls and jawbones, including Broom’s massive *Paranthropus robustus* from South Africa. He was also influenced by the enormous teeth found in China. He could not devise a scale whereby body stature could be measured from the teeth; but he argued that huge teeth and large jaws must have belonged to large bodies.

Weidenreich’s estimate is that man’s ancestors were twice the size of a male gorilla. This creature is often six feet in height, with a weight of thirty stone. Double those proportions and you have

a giant indeed. “The human line, I believe, leads back to giants the farther back it is traced,” Weidenreich declared firmly. “The giants may be directly ancestral to man.”

What support does Africa give to this interesting theory? Professor Denis Saurat, another believer in giants, regards the colossal statues of Egypt as evidence. He also points to gigantic stone implements found in Morocco not long ago, tools which could only have been handled by giants twelve feet in height. Saurat accounts for the giants by an ingenious theory. He thinks that the gravitation exerted by earlier moons inclining close to the earth lessened the weight of all creatures, drawing them upwards. Living things grew taller, giants were born and they lived to great ages as described in the Bible.

Saurat's critics declare that time and size were measured differently in Biblical times. Moses counted a lunar month as a year, which gives Methusaleh the respectable age of seventy-five years. Goliath was probably about nine feet nine inches in height.

Giants certainly appeal to the popular imagination. Those great images at Karnak and elsewhere suggest that the ancients believed in giants, though statues cannot be accepted as proof of giants. It seems, however, that many legends of giants arose when early man encountered human beings taller than himself. Travellers' tales were exaggerated by one generation after another until a six-footer became a twelve-footer.

Other sources of giant legends were skeletons and teeth dug up in various

places and falsely identified as human remains. Large teeth and bones were looked upon as relics of the giants, whereas modern anatomists have had no difficulty in recognizing them as parts of mammoths, mastodons and other ancestors of the elephant or the woolly rhinoceros. Even the Cyclops, the one-eyed giant of Homer, was simply a tusk less elephant skull. Dr. Abel of the Vienna University demonstrated the resemblance between the elephant's skull and the human skull, and showed how the elephant's nasal opening might well be taken for a single eye-socket in the middle of the forehead.

Yet there are giants in Africa, whole tribes in which men far above average height are common. Along the Nile I have seen the slender naked, black Dinka fishermen hurling spears into the

muddy water. Some are eight feet in height, and their long legs enable them to cover seventy-four miles a day. Here, too, are the Shilluks with their reed canoes, and the Nuers with tribal cicatrices across their foreheads from ear to ear.

Tallest of all African tribesmen are the Watussi people. In fact, the *average* height of the male Watussi (six feet six inches) places them beyond question as the tallest race in the world. In every generation some of the men grow to nine feet. Their home is the Ruanda province of the Belgian Congo. According to their own tradition (which anthropologists see no reason to doubt) they once lived in Egypt. When they migrated, they drove the magnificent long-horned cattle called *inyambo* with them; cattle with gigantic horns measuring eight, nine,

ten feet from point to point; the right sort of livestock for a race of giants. These are the cattle which are to be seen in those lovely carvings on the walls of the tombs in the Valley of the Kings at Luxor. No other cattle in the world possess such magnificent, lyre-shaped horns.

Another point in favour of the Egyptian origin of the Watussi is the fact that they are Hamites, not negroes. They settled in Ruanda about four centuries ago, and they rule many smaller natives, including pygmies. Some of the Watussi chiefs have profiles which bear a strong resemblance to the faces of the ancient Egyptian kings.

What makes a giant – or a pygmy for that matter? Doctors talk about diet, and no one has been able to explain why those proud native aristocrats, the Watussi, reached their unusual heights.

Obviously they have kept the race pure from generation to generation, but the physique of these giants is a baffling problem.

Dancing, running, javelin throwing and archery are among the Watussi pastimes. Young warriors can hurl the javelin with such force that the shaft breaks in the air. When the King of Ruanda entertains white guests he calls his young giants together and orders them to leap over the heads of the visitors. These young men line up about forty feet away from the guests, race towards them one after another, and clear every head easily. I have been assured that the Watussi high jump record stands at well over eight feet. In other words, the finest Watussi jumpers can beat the world high jump record by more than a foot!

One of these days a Watussi athlete will appear at the Olympic Games, and then there will be no more doubt about these jumping giants. Incidentally, the Watussi wear flowing robes of silk when they vault over their visitors. Many photographs and films have been made in Ruanda, and the high-jumping demonstrations are no longer regarded as tall stories. One jumper named Butera (seven feet five inches in height) has become so famous that his portrait is used on the local banknotes.

Strange to say, the Watussi women seldom grow above average height. Many of them do not exceed five feet. Women of quality do not often appear in public, and when they do they are usually carried by their servants on canopied litters.

One of the most interesting giant legends in Africa is told to this day by the Somalis living between the Juba river and Lake Rudolf. This is an almost waterless country where the Somali nomads live more like camels than human beings. They breed cattle and goats, however, and some are ivory traders. There are disused wells in various places, old wells dug long before the Somalis arrived in the country by a race which owned more cattle than the land will support nowadays.

These wells, according to the Somalis, were dug by giants. Only a race of giants, they say, could have bored through the rock in such an ingenious way. Moreover, the skeletons which they had found gave ample proof that the well-diggers were men of great height. Where else

would you find a thigh bone two paces in length?

Certainly the wells could only have been planned, constructed and used by intelligent people of superior physique. Hundreds of these wells are to be seen in the Wajer Dima area, and elsewhere there are artificial water-holes made by the same vanished race. The wells start with a perpendicular shaft eight feet deep with a diameter of three feet. Then the bottom was hewn out downwards and outwards to a greatly increased diameter; and finally inwards and downwards in the shape of a wine decanter with a short neck.

In the rainy season the wells were filled with the aid of surface channels. Steps and handholds were cut into the sides, so that a giant watering his cattle might go, up and

down with goatskin containers. Many of the wells are sixty feet deep, so that the effort would have strained the muscles of a giant. Somalis do not make the effort. Some wells have eighty-year-old trees growing out of them.

Maanthenle, the Somalis call the well-builders. Some say they were wiped out by an epidemic; others talk of flying dragons that came and devoured all the cattle so that the giants had to leave the country. But of course the ghosts of the Maanthenle still haunt the old wells; ghosts of men ten feet in height.

Archaeologists believe that the Somali legend has some foundation in fact. One of the tall Nilotic tribes must have inhabited the country in the past, and moved on leaving only the mysterious wells and burial

cairns which have never been explored. Among the Kenya tribes are the Turkana herdsmen, tall and long-headed people, a tribe in which males seven feet high occur here and there. Perhaps the Turkana are really the Maanthenle.

But when you think of all the people who have lived along the Nile you face one of Africa's oldest mysteries. When I remember those naked tribesmen in the swamps I have a sharp vision of one giant after another standing in the typical pose of the Nile people. Each man is balanced on one foot, with the other foot pressed against the inner surface of the knee. He has a long spear. He belongs to a river far longer than the memory of man. Among those who drifted out of Egypt long, long ago and

followed the Nile to its source were
the giants of legend.

CHAPTER 13

WHO FOUND THE DIAMONDS?

WHO PICKED up the first South African diamond? That is a question which will never be answered, for the diamonds were there long before the human race. Unknown Bushmen or pre-Bushman hunters must have seen and touched diamonds often during the centuries when a buck or a tortoise or even an edible root was worth more than the Cullinan.

Discoveries of great riches have a way of becoming controversial. I would not have dared to re-open the story of the first diamond but for some valuable information which I found recently among my late father's papers. My father was editor of the *Diamond Fields Advertiser* for a number of years. He knew the pioneers.

I have also met all sorts of pioneers and discoverers and survivors in my time. They taught me that people who have taken part in historic events are easily annoyed by accounts which differ from their own memories. Those I met were always ready to denounce impostors. I learnt, too, how dangerous it was for a journalist to describe an old-timer as the last member of some famous expedition or heroic episode. No sooner was the paper out than the office would be stormed by angry pensioners, shaking their fists and asking me to decide whether they were dead or alive. At one time any mention of the first discovery of diamonds started a violent argument. Now that the shouting has faded I may be able to sort out the facts of a South African drama which is worth investigating. The characters

have all gone now, but they have not been gone for long.

Rumours of diamonds were heard in South Africa many years before 1867, when the first positive identification of a diamond was made. More than one travelling missionary heard talk of diamonds, but their eyes were not on the ground. The Rev. John Campbell, who crossed the Orange River early last century, noted in his journal: "One of our people on first coming to this river had collected many kinds of bright stones. He is now looking them over and throwing many of them away, having better knowledge. Age and experience discover many things to be trifles which in youthful days were highly esteemed."

Possibly that pebble collector threw away a fortune. Others may have recognized some of the stones as

diamonds and said nothing about their finds. Professor E. H. L. Schwarz, the geologist, traced a South African diamond which was sent through Mocambique to Europe years before the official discovery. Then there was the incident at Duwenaarsfontein.

Young sheep farmers met at a little store on the farm Duwenaarsfontein in the middle of last century. Hopetown was built on the site later. The farmers hunted springbok there and ran their sheep in the wild country on the very edge of civilization. One evening they were sitting round the wine barrel and talking about the bright stones found along the Orange and Vaal rivers. A farmer produced a beautiful, flashing stone. Someone remarked: "That can easily be tested, for diamonds are unbreakable." No one knew enough to contradict this statement. The sledge

hammer came down and powdered the diamond. Those men recalled the incident often after the great discovery.

Among my father's records was a statement, apparently by a German missionary named Kallenberg or his assistant, Adam Zermott, regarding an early diamond discovery. It seems that Kallenberg settled at Pniel (near the present Kimberley) in 1866, and was visited there by a Koranna in search of religious instruction. Kallenberg, who had read about diamonds, advised the Koranna to look out for any bright stones. "You can test them in the fire," the missionary told him. "Those that pop are worthless, but if they stand the heat they may be diamonds."

One day the Koranna found a shining stone which resisted the fire. He intended to take it to Pniel on his next

visit; but his daughter gave it to a smous in exchange for some calico and wine. The Koranna reported the transaction to the field cornet and recovered his diamond.

Kallenberg was away when the Koranna next called at Pniel; and Zermott, who was in charge, knew nothing of diamonds. He suggested that the Koranna should take it to the nearest storekeeper.

The storekeeper offered to negotiate the sale, and sent the stone to Amsterdam. Long afterwards the storekeeper gave the Koranna a horse, a wagon, some sheep and a small amount of money in full settlement. Thus it seems probable that the stone was not only genuine but valuable. Now for the first recorded discovery in 1867 on the farm De Kalk near Hopetown. According to Theal, a farmer named Schalk van Niekerk was

calling on his neighbours at De Kalk when he saw the children playing with a remarkably brilliant pebble. Van Niekerk admired it and was told he could have it. Soon afterwards Van Niekerk showed the stone to a trader named John O'Reilly, who was fairly sure that it was a diamond. O'Reilly sent it to Dr. W. G. Atherstone of Grahamstown. It was a diamond of twenty-one carats, and the Cape governor, Sir Philip Wodehouse, bought it for five hundred pounds.

That is in essence the true story, I think, but it omits a number of interesting sidelights. Moreover, it does not answer the natural question – who picked up the diamond? My father's papers and other sources fill some of the gaps. George Beet, the Kimberley pioneer, prospector and historian, always maintained that the O'Reilly

diamond was picked up in 1866 by Erasmus Stephanus Jacobs, aged thirteen, son of the owner of De Kalk. He secured a written statement to that effect from Jacobs about half a century afterwards – time enough for the memory of an experience in childhood to have faded. I found a copy of this statement in my father's file on the subject.

Jacobs said that his home was about four hundred yards from the Van Niekerk homestead, and about two hundred yards from the Orange River. "I found the stone on the flats above a ravine that ran towards the river," Jacobs declared. "I had been sent to gather some branches of a willow tree for building, and I noticed something glittering in the sun. When I picked it up I saw that it was a very pretty pebble with pointed sides. I gave it to my

sisters to play with. The diamond was in my possession for about fifteen to twenty days before Van Niekerk saw it." Everyone concerned in the episode told a different story about that diamond. In fact, a note in my father's records sums up the situation admirably in these words: "It is difficult to avoid the impression that with a view to self protection or ultimate interest, nearly all the early finders or dealers were remarkably vague or else contradictory in their statements. If Mr. Beet's date of 1866 is correct, a conspiracy to keep things dark must have extended to various officials."

John O'Reilly, whose surname was given to the diamond, was one of three brothers who set out regularly on well-equipped hunting and trading expeditions. They were sons of a Cape

magistrate, grandsons of a British general. They had twenty white men with them, forty Bushmen, ten wagons, over one hundred horses and two hundred oxen. It was an adventurous cavalcade indeed that pulled out of Colesberg in March 1867.

No one seems to have taken a statement from John O'Reilly, and he died in 1904. John O'Reilly did write briefly to the Lieutenant-Governor, Sir Henry Barkly, however, and in that letter he stated that the diamond had been picked up by a Bushman boy.

In 1918, John's brother Henry wrote a description of the episode which I have in my possession. Henry declared that he was with John O'Reilly when they arrived at Schalk van Niekerk's farm on the historic occasion.

“We outspanned, and the old lady told us of a piece of glass or stone which a little Hottentot girl had picked up in a sluic running down to the Orange River,” recorded Henry O’Reilly. “No one could find it as the children had been playing with it. Candles were lit, and the stone was found under an old-fashioned bench with some ox-bones used as playthings.

“Van Niekerk gave the stone to my brother to look at. The table was laid for supper and I can remember how the stone gleamed in the light of the old fat candles.

“‘It is a diamond,’ I said. ‘Anyone can see it is a stone worth money.’

“Van Niekerk disagreed. ‘How will diamonds be found in South Africa?’ he asked.

“My brother said: ‘We will sell it and give you half.’

“Van Niekerk remarked: ‘Give the children a bottle of sweets and that will be enough.’ ”

Next morning the O’Reilly brothers set out for Colesberg, with Hopetown as their first calling place. They drove into the yard of Power’s hotel and went to the billiard room. Everyone was surprised to see them back so soon. Mr. W. B. Chalmers, the magistrate was there; and among others was a Mr. Hond, who claimed to have a knowledge of diamonds.

“We showed them the diamond, and they all laughed and said it was a crystal,” goes on Henry O’Reilly’s narrative. “Hond threw it out of the window. I went out and picked it up. My brother was annoyed, and told

Hond that he knew nothing about diamonds. John then went to the window and cut his initials on the glass with the diamond. They are there to this day: J. R. O'R."

When the O'Reilly brothers returned to Colesberg they entrusted the diamond to Mr. Lorenzo Boyes, acting civil commissioner. Boyes sent the diamond to Dr. Atherstone, but he packed it so badly that it rolled out on the floor of the Grahamstown post office and was nearly lost. Atherstone was not only a qualified medical man and surgeon, but also a keen amateur geologist. He recognized the stone as a diamond immediately, but on the advice of his friends he checked the specific gravity and tested it on glass and on a sapphire.

Sir Henry Barkly was giving a dinner at the Drostdy that night. Atherstone

caused a sensation when he rose and announced the discovery.

"The stone you have sent me is a diamond," Atherstone wrote to Boyes. "It weighs over twenty-one carats and is worth about five hundred pounds. There is no doubt about this, as I have submitted it to every known test. It has spoilt the files of all the jewellers of Grahamstown, who have been filing at it. Where that stone comes from there'll be heaps more, you may be sure."

Hurst and Boskell, the Crown jewellers in London, confirmed Atherstone's verdict. On the suggestion of the buyer, Sir Philip Wodehouse, the O'Reilly diamond was sent to Paris and displayed at the great exhibition then in progress.

John O'Reilly (or probably the O'Reilly brothers) paid half the five hundred pounds received from Wodehouse to Van Niekerk. The amount given to Jacobs of De Kalk is not on record. George Beet, however, declared that Van Niekerk was an upright man who would never have denied his neighbour a fair share of the proceeds.

Van Niekerk was also a shrewd and determined man. Once the pebble had been identified as a diamond he set to work searching the district for further wealth. Indeed, every farmer, transport rider and hunter turned to prospecting, with every available Koranna searching the veld. At first the results were disappointing. A so-called expert named Gregory arrived from England, and declared (without examining the area) that the O'Reilly diamond had

been carried to the Hopetown district by an ostrich. He said that diamonds would never be found in the volcanic South African soil, and suggested that Brazilian diamonds had been imported to "salt" the fields.

According to my records the second diamond was found by Jan Duwenaar, who had owned the farm on which Hopetown was built. The O'Reilly brothers gave him a number of sheep for it. But it was not until 1869 that a really important find was made, and then our old friend Schalk van Niekerk came into the limelight again. Van Niekerk had remembered seeing a brilliant stone among the paraphernalia of a witchdoctor. He located the witchdoctor after a difficult search and acquired the magnificent diamond of eighty-three carats which became famous as the "Star of South

Africa". Van Niekerk received over eleven thousand pounds for it and before long the Earl of Dudley paid more than twice that price, to secure the beautiful stone. The rush was on. One farm which anyone could have bought a few years before at a shilling an acre produced diamonds worth a million pounds a year.

Erasmus Stephanus Jacobs, the farmer's son who appears to have started it all, remained a poor man all his life, working as a transport rider. He died in 1933 at Beaconsfield. What of the Hottentot girl and the Bushman boy? Did the O'Reilly brothers imagine these shadowy figures in the drama? Who picked up the first diamond? Nobody knows.

CHAPTER 14

KALAHARI MYSTERIES

ONE NIGHT in the Kalahari I camped on the edge of a small, cracked mud pan. I look back on it now with longing, though it was not a luxurious camp. The tent strained in a cold wind. Strings of biltong and jackal skins made a wild frieze between the thorn trees and from a branch hung my leather coat, bandoliers, canvas water-bags and field-glasses. A board on petrol cases formed the table, decorated with a brandy bottle and some pickles into which the red sand had entered.

Men sat round this table of content on biscuit tins. The fire, with its red glow and white ash, promised coffee. Somewhere in the darkness our boy Willem was cleaning the tin plates. It was impossible for anyone to imagine

he was anywhere but in the desert, and inevitably we talked of the Kalahari and its mysteries.

That was not long after the discovery of Drodsky's Cave, an event which we regarded as proof that the desert had not given up all its secrets. Mr. M. A. Drodsky of Livingstone, trader and desert guide, was leading a party of wealthy tourists through the desert in 1932 when a Bushman described the cave to him. Drodsky had been friendly with the Bushmen for half a century; and so at long last they had overcome their superstitious fears and shown him the entrance.

Drodsky's Cave lies to the west of Maun in Ngamiland, but the track through bush and dunes is so difficult that a motor-car takes about four days to reach the spot from Maun. Yet this

cave might rival the wonders of Congo if it were fully explored.

Bushmen call the place Khnihabe (Hill of Devils). It is a series of caves and natural galleries in a rocky hill near the bank of a dry river; and the Bushmen believe the depths are inhabited by devils in the form of dangerous beasts. An official expedition sent to the caves by the Bechuanaland authorities in 1943 found that the fears of the Bushmen were to some extent justified, for there were leopards in the caves.

Drotsky had been informed by the Bushmen that the old cave entrance had been blocked after an earthquake early this century, and that a new entrance had opened. Mr. W. Cairns, acting district commissioner, and Mr. E. J. Wayland, a geologist, found in 1943 that the cave was almost hidden by

fallen rocks. They climbed down a steep slope and discovered three main caves which, they imagined, led into other large chambers. Magnificent stalactites and stalagmites were seen, and in one chamber the crystalline pillars were so impressive that they reminded the geologist of Karnak and other Egyptian temples.

Mr. Wayland regarded the presence of this cave among sand dunes as evidence of climatic change. He could not find Bushman paintings or signs of human occupation, but suggested to the Royal Geographical Society that earlier Stone Age relics might be found beneath the cave-earth. Apparently no white people visited Drotsky's Cave again until 1950, when Dr. F. D. du T. van Zyl of Cape Town led an expedition there during his search for the "lost city" of the Kalahari. Dr. Van

Zyl reached a depth of over one hundred and fifty feet. Members of his party found remains of buck and also evidence of human occupation in the shape of a burnt ostrich egg-shell and chopped bones. They, too, formed the opinion that other relics might be found by excavation.

The mystery they were unable to solve was the layer of soot nine inches thick which they found below the surface near the entrance. It seemed that the desert must once have been covered with trees, and that the soot blew into the cave after enormous forest fires. Deposits of ash, charcoal and soot were so thick that they must have taken years to accumulate in the cave.

There is more than one legend of a lost city in the depths of the Kalahari, and a number of travellers have undoubtedly seen ruins which were difficult to

explain. Anderson, in 1872, discovered a group of ancient stone huts built on a hill close to a dried-up river. The huts were so small, he said, that not one would hold more than four people. "No account of them could be obtained from the Bushmen," declared Anderson.

Another interesting story concerns a remote spot in the desert where there is a ruined fort, cannon, *naartjie* and almond trees. There is no doubt about the fruit trees, for the Bushmen who described the ruins brought *naartjies* to Gobabis. The presence of rusty cannon in the desert has been reported again and again. Some of the rumours probably have their origin in the old German outpost of Rietfontein on the South West Africa / Bechuanaland frontier, which must not be confused

with another Rietfontein border post much farther south.

Rietfontein in the north is a waterhole which was occupied by German troops in 1904, during the great drive which broke the power of the Herero nation and sent the remnants of the native army flying into the desert. The men at Rietfontein had two cannon with which they saved their lives on more than one occasion when they were isolated from the main German forces. For nearly thirty years after the campaign, however, the Rietfontein outpost lay abandoned, visited only by Bushmen. Thus, in all probability, one legend of mysterious cannon arose. The story of the ruined fort, however, still calls for explanation, as the Germans at Rietfontein had nothing but the earth-works they threw up to protect themselves.

Anderson is said to have discovered a wonderful diamond field in the Kalahari, but was forced to leave the spot by hostile natives. There may be diamonds in the desert; Bushmen were said to have brought some beautiful specimens into Gobabis years ago. But I am doubtful about the story of the early trader who saw a Bushman carrying an arrow tipped with gold. A great white quartz reef traverses part of the desert, according to one account, with rich gold visible to the naked eye. Such treasure is not left long undisturbed.

One of the most remarkable characters who ever ventured into the desert wastes was the Boer hunter and trader Van Zyl, a man whose death gave rise to a Kalahari treasure legend which may have some truth in it. Van Zyl, incidentally, could probably have claimed the most deplorable day's

elephant hunting Africa has ever known. In the 'eighties of last century he drove a herd of more than a hundred elephants into a morass near Maim, the headquarters of the Batawana tribe. He shot the lot.

Muzzle-loaders, powder, lead, brass, wire and beads, in which Van Zyl traded, and the ivory secured during his own ruthless hunting, were the means by which Van Zyl amassed a fortune. In 1892 he engaged a man named Robert Rankin to build him a mansion in the heart of the desert beside Ghanzi pan. It was a wonderful house to find in such remote surroundings, with its stained glass windows, plank floors and handsome doors. There Van Zyl settled with his wife and family in 1892, employing white hunters to bring him ivory, trekking down to Walvis Bay occasionally to sell the tusks.

Close to the luxurious homestead the Batawanas waged war on the Damaras. Once the Batawana chief Moremi was routed and rushed for sanctuary into the dining-room of the Van Zyls while they were at dinner. Van Zyl hid the chief under the tablecloth, saving him from the pursuing Damaras. When the Damaras learnt how they had been tricked, however, they planned revenge.

Van Zyl came to know that his life was in danger, and sent his wife and children back to the Transvaal in charge of his white hunters. He himself set out in the opposite direction with a great wagon-load of ivory for Walvis Bay. Two days after leaving Ghanzi the Damaras ambushed the wagon and Van Zyl was murdered.

Among Van Zyl's followers was a Bushman called Old Tom, who escap-

ed from the ambush and was still living at Ghanzi, more than one hundred years of age in 1936 when I was there. Old Tom declared that Van Zyl, scenting danger, had hidden a large stock of ivory and bags of money, all packed in tarpaulins, in a limestone cave near Ghanzi. According to Old Tom, his master had a secret gold mine from which he sent many wagons of ore to “Baas Paul” (President Paul Kruger of the Transvaal Republic). Now only Bushmen live round the great hole in the koppie where Van Zyl found his gold.

Van Zyl’s gold mine may be a myth, but the settlers of Ghanzi are convinced that Van Zyl’s money will be unearthed one day. A strange life this murdered hunter led, alone with his family in the Kalahari. He asserted his right to a huge tract of country and turned several

white traders away. Indeed, he tried to prevent the Boer wagons bound for Angola from passing through his desert domain. What secrets died with him in that Damara ambush?

Such is one of the tales coming from a huge country which still has its unmapped spaces. Everything that is dry and sandy between the Zambezi watershed and the Orange River is the Kalahari. The boundaries run arrow-straight for hundreds of miles. No water is seen for years in the rivers. Weird pans, patches of grass and bush, old wagon tracks – these are the main features of a land much greater than France. At night the hush is broken by the roaring of lions, the cries of wild cat, jackal and leopard.

Signs of struggle left by man on the face of the Kalahari are but faint, insignificant marks. The red dunes

move on. Night winds hiss through the grains of sand. Explorers may talk of their little discoveries, but the sand covers the great things and hides the old wonders of the land.

Most of the Kalahari outposts have been built beside pans, the reason being that water is usually found where the limestone outcrops at the edge. Ghanzi, Tshane, Lehututu and Kalkfontein – all look out on blinding white pan surfaces where the heat rises in pitiless waves. At Lethlo Pan some years ago hundreds of animals were trapped in the clinging mud. They came to drink at a spot where there had always been water, even in the driest seasons. That year the supply failed. Herd after herd of thirsty buck rushed into the morass; wildebeest, reedbuck, roan antelope. A hunter who was there told me that he blamed the elephants for the tragedy.

One large herd sucked up the last of the water, wallowed according to custom and went trumpeting away. It was a feast for the vultures.

Few white people lived deep in the Kalahari early this century. Traders followed the Ngami trail. A scientist collecting skins for museums found that many of the natives still regarded money as a curiosity, and a shilling was handed round and admired by a gaping crowd. But they would hand over almost anything they owned in exchange for tobacco.

I remember a story told by a police trooper of that period. He visited a farm on the Bechuanaland border and happened to look into a large barrel. A huge python reared up, hissing angrily. The farmer said he kept it to deal with vermin on the farm, and let it out at night. While

the astonished policeman watched, the farmer's little son opened the python's mouth, dropped in some eggs and two bottles of milk, then pushed the python's head back into the barrel. There were some tough children in the Kalahari.

Many thousands of South Africans must regard the famous, gigantic, untried Schwarz scheme as the greatest Kalahari mystery of all. Would it work – or would millions of pounds be thrown away? I knew Ernest Schwarz, the bearded professor, and his devoted wife who carried on the Kalahari campaign for years after his untimely death.

Schwarz was an Englishman, educated as a geologist at the University of London. For years he travelled about the old Cape Colony by ox-wagon on a geological survey. His

only companion was Klaas Trompetter, his driver and cook, a little Bushman who not only mended harness and *velskoene* but also taught Schwarz the lore of the veld. And it was out of Schwarz's love of the country and horror of the distress caused by drought that the Kalahari scheme arose.

"My husband saw, in lonely corners of the Cape, that the families were dwindling as a result of the ever-increasing dryness," Mrs Schwarz told me. "Later he studied the reduction of Lake Ngami from a great lake to a swamp, and then to a bare plain, and this seemed to him one effect of a process that was doing widespread injury to South Africa: Then, in 1918, he made a grim journey into the wilds of Ovamboland to investigate the western area of his

scheme. All along the route he came upon the skeletons of Ovambos who had died in a famine. That was his inspiration.”

So it was that Professor Schwarz announced in 1918 the first details of his scheme to put an end to drought in South Africa. He showed South Africa as a high block of land with steep borders, the water pouring away through gaps in the encircling coastal mountains. The central districts were being drained.

“We must turn off the taps,” Schwarz wrote. “The evaporation is three times the rainfall. South Africa is being wrung dry. The central lakes (such as Ngami) are no longer there to supply the moisture for the air in the central districts.

Schwarz proposed to build weirs on certain rivers, thereby flooding the Etosha Pan and large areas of the Kalahari. The estimated flow, he thought, would irrigate six thousand square miles a year, rendering some of the land fit for ranching while much of the soil would carry wheat, maize and cotton.

“When the gaps are blocked up and the old Kalahari lakes are once more there to supply the air of South Africa with moisture, the old central river of the Kalahari will once more flow,” Schwarz wrote. “All down the course from Ngami to the Orange River, settlements will arise and agriculture of the same scale as that in Egypt will spring up. So with the rest of South Africa ... Whereas on the irrigation schemes only men with considerable capital can be expected to benefit, on

the Kalahari project everyone in South Africa will see his land rendered more fertile, and all his difficulties from drought, famine and pestilence disappear.”

It was a vision. Scientists attacked it, but there is no doubt that the Schwarz scheme appealed enormously to the ordinary farmer – especially in times of drought. I once met a grey-haired French colonel named C. F. Naus who actually carried out a sort of Schwarz scheme in miniature in the Ngamiland swamps. This clever engineer came to Africa after World War I in search of peace “and not too much civilization”.

Naus walked through East Africa with two carriers. He shot elephants in the French Congo and lions in Angola. Nearly everyone in the tropics took quinine and slept under mosquito nets in those days; but Naus brushed all

the precautions aside and suffered only as a result of a meal of wild onions. At last he arrived in Bechuanaland when Sir Charles Rey was resident commissioner, and he found work clearing the choked rivers of Ngamiland. Hippos were his main enemies, for they upset the dug-out canoes. In the end he designed an unsinkable, hippo-proof steel boat. The late Colonel Deneys Reitz often joined Naus on his voyages through the unmapped swamps.

I saw for myself what Naus had achieved on a small grant, for he had restored many old channels and brought the lost water back to Maun. It was a victory over a watery wilderness and its creatures; not only hippos, but crocodiles and leopards, mosquitoes and tsetse fly.

Naus, who probably understood the implication of the Schwarz scheme as well as Schwarz himself, was never able to make up his mind whether it would be a success. "It would be a gamble," he told me. "A gamble with millions of pounds at stake." So the Schwarz scheme remains among the mysteries of the Kalahari, and it will be a bold government indeed which puts it to the test.

Even the name of this desert is a mystery. Burchell the traveller mentioned a people known as the "Karrikarri" living north-west of Kuruman, so you can accept that origin if you do not object to a wild guess. But like the Sahara, no one knows the Kalahari.

CHAPTER 15

THEY LEFT STRANGE NAMES

*He left a name at which the world
grew pale,
To point a moral or adorn a tale.*

DR. JOHNSON

WHEREVER I go in Africa I always seek the meanings of strange place names. My collection of books, pamphlets, extracts from magazines and newspaper articles on this subject is growing. Some of the most fascinating items come from readers who know of my hobby and help me to solve the mysteries.

I have beside me, as I write, “Official Place Names in the Union of South West Africa”, a volume of nearly four hundred pages with about ten thousand entries. This aims at achieving uniform spelling, and does not,

unfortunately, deal with origins. But the mere list brings to light hundreds of unknown and little-known places with names that arouse curiosity – and other emotions.

Africa has its full share of strange and puzzling names, and it is too late now to discover all the origins. But the name Africa, old as it is, has never been a mystery. First the whole continent was called Libya. Carthaginians, dwelling close to where Tunis now stands, called the hill country beyond their city walls after the tribesmen who lived there, the Awriga people of Berber stock. Awriga is pronounced “Avriga”. When the Romans took Carthage and its hinterland, they called the whole province Awriga or Africa. As the Romans made further conquests, the old title of

Libya was dropped and the continent became Africa.

Who named Rhodesia? Though the former names of Matabeleland and Mashonaland gave way officially to Rhodesia as recently as 1895, it is difficult to trace the man who suggested the change. Mr. W. E. Fairbridge, a tireless historian and great Africana collector in his day, certainly had something to do with it. He once told me that the names “Charterland” and “Zambesia” were proposed, but these were unpopular. “Rhodesland” came next, but that was regarded as clumsy. Fairbridge, who was editing a pioneer newspaper in Salisbury, remembered someone coming into the office (or rather the hut where the newspaper was produced) and suggesting Rhodesia. “I promised to mention the idea to the

high officials of the Chartered Company, and they adopted it,” Fairbridge recalled.

Some people liked the resounding old name Gubulawayo before it was changed to Bulawayo, while Fort Salisbury was more romantic than the modern Salisbury.

Ferreira’s Camp, you may remember, was the earlier name of Johannesburg. But who was Johannes? It is strange that there should be an element of mystery about such a recent and world-famous name, but it is so. President Stephanus Johannes Paulus Kruger gave his authority for the name, but it is unlikely that he looked upon it as a personal honour. (“Oom Paul” was never very fond of Johannesburg, and not without reason.) Johann Rissik and Christian Johannes Joubert, the commissioners

who declared the area a public gold-field, cannot be ignored. Johannes Meyer and Johannes Lindeque played their part in laying out the town. But there is no agreement, and you will search the reference books in vain for a decisive and satisfactory ruling.

Bloemfontein raises another doubt. A fountain surrounded by flowers might well receive such a name; but Mr. Arthur Barlow, who played on the banks of that fountain as a boy, recorded the fact that the arid soil did not encourage such botanical wealth.

Barlow preferred the Jan Bloem theory. A Koranna freebooter named Jan Bloem was supposed to have lived near the fountain in the first half of last century before the town was born. That sounds authentic; but it is strongly opposed by Mr. E. G. N. Bezuidenhout, M.P.C., an authority on

place names in the Orange Free State. He declares that Bloemfontein was named by the Britz family, who settled there as far back as 1820. One brother Gert trekked on to the Transvaal, and the town of Britz was named after him. Another brother Randolphus bought a piece of ground from a Griqua chief, built a house next to a stream and called it Bloemfontein. Barlow once asked a son of Randolphus Britz whether he could throw any light on the matter. All the son could tell him was that a cow named Bloem once fell into the fountain.

Some people think the town was named after Cornelius De Jongh Bloem, who arrived there in 1859. That is disproved by a letter signed as early as 1846 by Major Warden, the

British resident, in which the name Bloemfontein appears.

The Rev. Charles Pettman went into the matter very thoroughly some years ago. He found evidence that Jan Bloem was still leading his band of cattle raiders in 1857, but there was nothing to show that he had ever used Bloemfontein as a base. Pettman favoured the flower origin, for he knew that flowers always made a deep impression on the early trekkers and settlers. Botanical names are found everywhere in South Africa, from Aalwynfleur in the Cape to Wonderboom in the Transvaal.

Walvis Bay is a dubious name, though there seems to be no room for mystery when you recall that it was a whaling base long ago. Yet there is a mystery. When the Cape Government annexed the bay in 1875, the official

proclamation referred to Walwich Bay. Only recently I found in my collection a statement on this point by the last century historian, the Rev. D. R. Kannemeyer. "Walwich Bay is named after Captain Walwich," he wrote. "It is incorrect to call it Walvisch Bay. It has no connection whatever with the great oceanic mammal disporting itself in these southern waters."

Some writers have stated that Edenburg in the Free State is a corruption of Edinburgh, but that is entirely wrong. Mr. E. G. N. Bezuidenhout, M.P.C. traced this name back to a party of Voortrekkers, some Doppers (Nederduits Hervormde Kerk), others Gatjaponners (Nederduits Gereformeerde Kerk) who formed a *laerplek* on the present town site. Religious arguments arose, and the Doppers

moved off and founded a settlement of their own. They called it Reddersburg because they had been “saved” from those who remained behind. Not to be outdone, the Gatjaponners named their home Edenburg, an earthly paradise after the departure of the Doppers.

Cookhouse (“change at Cookhouse”) is a bit of a mystery. It is often hot there, but not as hot as all that. The name may be a corruption of Kokskraal. Most of the really mysterious place names in South Africa refer to small, obscure places or farms. I remember a train journey some years ago with a member of an official place names committee, and he related to me the extreme difficulty which he sometimes encountered while trying to establish the truth.

Meanderthal is a bus halt about forty miles from Pietersburg in the Trans-

vaal. It baffled the commission until someone discovered that a surveyor had been naming one farm after another with the aid of a map of Germany; and Meanderthal, of course, should have been Neanderthal, where the primitive human skull was found. Mosesfontein was on the map for a long time. Then the official researchers discovered that a Griqua named Adam Moos had once lived there, so the name was changed to Moosfontein.

Can you explain Collywobbles? It is a post office in the Umtata district, and Lt.-Col. W. H. C. Taylor unravelled it for me. Fourteen miles from Elliotdale the Bashee River winds through impressive scenery, and many years ago a Colonel Colley stood gazing down on the waters.

“My word, how that river wobbles!” remarked Colley. “Yes, in fact it Colley Wobbles,” declared his companion. And so Colley Wobbles found its way on to the old Transkei maps. The place names committee erred slightly in spelling it Collywobbles. Colonel Colley was no myth. He was killed at Majuba.

Jambiela is a koppie in the Barberton district. It sounds like a native name, and it may be. But according to local legend a *karweier* of the early days, an English transport rider nicknamed John Bull, drove his horse too hard up that hill, so that it died. John Bull, a powerful man, then got between the shafts, and as a self-imposed penance he attempted to haul the cart up the hill. He, too, found the effort too great and died. John Bull was corrupted, so they say, to Jambiela.

Generations of the Heywood family have lived in the Swellendam district. When they became Afrikaans speaking they pronounced the name Heyfort. By a further transformation, a place originally known as Heyforts-fontein became Yzerfontein.

Kannemeyer found an Irishman named Delaney in this district, but he called himself Van der Linde, maintaining that this was the correct translation. Acting on the same principle, a travelling schoolmaster named John O'Neill became known to the farmers as Jan Spyker. O'Neill explained the change as follows: “It is all roight sur. You see, me name is John O'Nale, and isn't the translation of John Jan and Nale Spyker?”

I have always been interested in Baardskeedersbos, a pretty village in the Bredasdorp district, with one of the

longest names in the telephone directory. According to legend, a run-away seaman settled in a cottage in the bush early last century, adding to his income by wielding razor and scissors. The place is known locally as “B. Bos”, to save time. I wonder whether they have contractions for Mooimeisiesfontein and Oorbietjiesfontein? Grootmoordenaarspoort, another long name, vanished from the map to become Bushman’s School, then Caledon, and finally Bethulie.

Queer names include Blue Pig in Natal (six miles from Sunshine), Dead Mule and Bad Hope in the Cape, Desert and Slurry in the Transvaal and Pompie in the Free State. In this class, however, the prize goes to the Transvaal farm known as “Kiss-me-quick-and-go-my-honey”.

Breakfast Vlei is a hybrid, but not an unpleasant one. Among my favourite picturesque names is Johnston’s Leap near Barkly East. (Why did he leap, by the way?) And let us not overlook Fitzhenry’s Hope, Bessie’s Hope and Joe’s Luck. I wish that I knew their stories. Considering the ravages of the baboon and its place in South African folklore, it is surprising to find only three baboon names in the whole official list – Baviaan railway station in the Karoo, Baviaanshoek (Ceres) and Baviaanskrans (Riversdale). There are many more baboons on the map.

Pleasant names include a post-office called Armmansvriend (poor man’s friend), a railway station in the Oudtshoorn district called Aangenaam (agreeable), and Helpjouself near Aliwal North. Help yourself to what, I wonder? Rustmyziel (Rest my soul),

which is given in one of my old lists as a post-office in the North Eastern Cape, does not appear in the new guide. I would not care to abolish a name like that. And I hope that Misty Mount and Vrolikheid, Laggende Water and Aandster will long remain on the map. Cheddar, in the Free State, also has my approval. But no Stilton or Gruyere?

Siesta, a station on the Avontuur-Port Elizabeth line, owes its name to a system manager with a sense of humour. While the line was under construction a gang foreman fell in love with a farmer's daughter, Hester. His absences were frequent and someone always explained: "He's gone to see Hester." This became a well-known joke in the railway camp, and when the station received a name,

Siesta ("see Hester") was adopted amid cheers.

Many names come as reminders of the loneliness of the far, open spaces. Among them are Alleen and Alleen-gelate, Eensaam and Eensaamheid. A livelier spot, surely, must be Hollywood in the George district. Volkiesrivier on the road to Somerset East recalls the period when there was a vineyard there, and the coloured labourers gathered to hold drinking parties.

Unexpected names occur on the edge of the Kalahari, in the Vryburg and Kuruman districts. There you find Chicago and Floradora, Jaloers and Terra Firma, all motor-halts in the wilderness. I suppose Terra Firma marks a hard patch in the sandy desert, but Jaloers may have a romantic

origin. In the same territory is a railway station called Paradise.

Lehating, on the bus route from Kuruman to Camel's Rest, is a genuine puzzle. It may come from the Tswana word for skull; or from "dehating" (the place where the meat is dried); or from another native word meaning "to hide", because the people once took refuge there in the trees from wild animals. Finally, the name also resembles a word meaning "the place of footprints". Such are the problems of a place names committee in South Africa, a blend of history and adventure. Other desert names which beat the committee completely were Bonmail, Fugicalaus and Sonnyskin.

In the wide open spaces of the Kuruman district you will find a block of farms which make the map look like a patch of England. For here are

Eastbourne and Erith, Shirley and Weymouth, Beaulieu, Tewkesbury, Colville, Guildford and many more.

Not far away are scores of farms, each of about three thousand morgen, bearing the names of bygone officers of well-known Cape regiments: the Dukes, Cape Town Highlanders, Prince Alfred's Guards, Diamond Fields Horse and others. They were named soon after the Langeberg Rebellion of 1896-7, when the followers of a native chief Galashibe gave trouble as a result of the destruction of their cattle during the rinderpest. They murdered a white storekeeper and took refuge in the mountains. Colonel Woon of the Cape Mounted Rifles went after them but had to send for help; and fifteen hundred men of the regiments I have mentioned took part in the campaign.

Mr. J. C. Wessels, a Vryburg surveyor, led the Vryburg Volunteers. When he surveyed and named farms on land confiscated from the rebels afterwards he remembered his brother officers – Dalgetty, Neylan, Fuller, Tamplin, Hartley, Cox, Searle, Watermeyer, Spence, Lukin, Woon, Venn and many more.

Next to the farm named after Colonel Dalgetty is one called Luka. Luka Jantjie was a rebel chief killed during the campaign. His head was cut off and taken to Cape Town by the Highlanders for exhibition. Such souvenirs are not encouraged nowadays.

Surveyors have wonderful opportunities when they carry out their duties by naming farms. One surveyor named Orpen was an admirer of the Victorian novelist Mary Elizabeth Braddon, so he gave her titles to farms in the

Barkly East district – “Lady Audley’s Secret”, “Audley Court” and so on.

That reminds me of the story of Piet Marais, owner of the farm Varkensfontein in the ‘eighties of last century. Someone made him an offer for the place. He was reading Sir Walter Scott’s novel “The Fortunes of Nigel” at the time, in which the hero was almost swindled out of a fortune. Marais refused the offer, but sold out later to a mining company at a high price. He called the town that was laid out there Nigel.

I can imagine the weather at Drizzly, a railway station in the Lady Grey district. Scores of names, however, testify to the absence of rain, names such as Droëberg, Droëboom, Droëpan and so on. There is also a Droërskloof station on the Malmesbury-Klaver line; a place, I suppose,

where some cunning bygone farmer produced a crop of rice. The prize for thirsty names, however, goes to a spot near Prieska – Skilpadvrekvandors. A place where a tortoise can die of thirst must be barren indeed.

Sinister names are all too common. Helspoort and Moordenaarskraal have uncomfortable sounds. Most of you know Hell's Hoogte (a mild and safe pass, in my opinion) close to Stellenbosch. Perhaps you have not yet sweated at Otazell, a Northern Transvaal farm. In the Transkei there is a road near Qumbu called U-Satana. And there are many devils, from Devil's Peak to Duiwel's Kloof, Duiwel's Kanton, Devil's Knuckles, Duiwel's Bosch, Devil's Bellows and Devil's Frypan.

In the Cape Peninsula, old Mowbray residents still speak of Hell Fire

Valley along the Liesbeek, where the red-coated soldiers of last century drank and fought. Close by is Dooie-mankuil, where the body of a young man who had committed suicide was found hanging from an oak tree. His story has been lost, but he gave the neighbourhood a ghost legend.

Monomotapa is one of the old, romantic and mysterious African names. All the races that have settled in South Africa have contributed to the poetic names. Even the little Bushmen had their streak of inspiration. Gong-Gong, on the Vaal River diggings, is a Bushman word which recalls the sound of water tumbling on the rocks. Makwassie is derived from a Bushman word for an aromatic plant which their women used as a powder, just as the Hottentots used buchu.

Bushmen and Hottentots named many places, though most of their names have vanished because they were too difficult for white people to pronounce. You can pick out some Hottentot names by the word “Kamma” (water). Keiskamma, in the Eastern Province, means the “shining river”.

Zulu names are the most beautiful, perhaps, of all names coined by natives. Eshowe means “the place of beauty” and Umfolozi “my lucky star”. Mahlabatini, “the water running through the sand”, and Mtubatuba, “the place of white doves”, are other examples.

Not many Portuguese names have survived, and those still on the map are nearly all along the coast. These are indeed names for a poet, names worthy of Camoens : Saldanha and

Agulhas, Algoa and Natal, Cape St. Blaize and Cape Recife.

The old Hollanders left a great legacy of sentiment on the South African map. My favourite Dutch names are among the earliest they bestowed in Cape Town, the five bastions of the Castle: Buuren, Nassau, Leerdam, Oranje and Katzenellenbogen. Dutch and French are strangely mixed in some of the old country names, such as Chavannesberg. There is also Bretagne Klip, one of the three granite boulders on Paarl mountain – “Britanny Rock”. But you find French names far from the Cape in the Free State – Marseilles and Parys, Calais and Cabriere.

English names started with a sort of royal cavalcade, King William’s Town and Queenstown, George and Port Alfred. More interesting names came

later. I must not forget the Scots, who named Roburnia (formerly Robert Burnsia) and other places. Mac Mac goes back to the days when there were many Scots on the gold diggings.

Missionaries and members of the German Legion were responsible for many German place names in South Africa. Amalienstein near Ladismith is one of the most euphonious. You will find Berlin and Potsdam near East London. Another Potsdam just outside Cape Town was re-named Killarney by the Irish hotel proprietor at the crossroads.

Macassar, on the False Bay coast, is one of the few Malay names to be found in the Cape. Sheikh Joseph, the Macassar potentate who was exiled at the Cape in the early days, was buried in the *kyamat* not far away. The beach

was named after the Sheikh's old domain.

Leipoldt was the South African poet who knew how to use the magic of place names in his verse, taking liberties when he felt like it. A fine example is to be found in his "Sendelingkinders", which opens:

*Die wind die waai deur die denne
en spoel dit na die see.*

*Hy spoel dit oor ou Kaapstad, oor
Klapmuts, oor die vlei,*

*Oor Stellenbosch, Sarepta, en oor
die Botlary,*

*Oor Roodesand en Tulbagh en oor
Genadendal;*

*Hy waai dit noord Goudini-toe, tot
dit by Woester val.*

Place names tell stories by the thousand, and it is a pity that so many are forgotten after those who named

the little places have passed on. In the Calvinia district there is a farm in the mountains called Rebunie. Why Rebunie? All they can tell you is that it is a farm with an echo. When some bygone farmer called for his servant Rebunie the mountain echoed: “Roep my niet.”

Place names are full of echoes, and some of them mock us when we try to pierce their mysteries.

CHAPTER 16

LEGEND OF THE MAN-EATING TREE AND OTHER, BOTANICAL MYSTERIES

HAVE NO fear. There is no man-eating tree, no “missing link” between the plant and the animal kingdoms. Yet there may be a grain of truth in the undying legend of the sinister tree. This is a tale with many variations, and some I have traced to their sources. I have a theory.

Some investigators fell back on the carnivorous plants for an explanation. These remarkable growths have certainly inspired a number of fiction-writers, and I shall pause for a moment to examine them before passing on to the main quest and a more convincing theory of the origin of the legendary tree that devours human beings.

Africa has many carnivorous plants. The little sun-dew of the swamps has leaves like a rosette and tentacles which draw insects to their doom. Up in the Cedarberg mountains near Cape Town grows the large *Roridula* shrub which traps and consumes creatures up to the size of small frogs. Such a plant might conceivably also feed on ‘tiny mammals in the shape of mice. Bladderworts grow along the edges of streams with their trap-doors ready to admit little fish, spawn and insects.

These and other plants, such as the more spectacular pitcher plants, grip and digest their prey. Perhaps the carnivorous plants do account for some of the tales; such a tale as the “death flower” which, by its strange fragrance, drew an explorer into a cave, drugged him with its perfume, then folded its petals round him and

exuded the acid which left only the bones. “So passing into death through splendid dreams, the explorer gave his body to the plant for food,” ends the dramatic narrative.

I have also heard of a flesh-eating vine which caught and held a white hunter’s dog in some tropical jungle. While the hunter was cutting the dog free he found to his horror that the vine was sending living, sinuous fingers round his arm. He escaped, but with his flesh red and blistered.

Then there is the “snake tree” which is said to seize any bird which alights on its slimy branches. Bones and feathers litter the earth below the tree. An explorer fed the tree with chickens so that he could study the process, and observed suckers like those of an octopus on the branches. Thus the tree drew the blood from its victims.

Another species, the “monkey-trap tree”, is reported to specialize in monkeys. No sooner have they climbed the trunk than the leaves close in and that is the last of them, save for the bones (completely stripped) which fall to the ground a few days later.

Now we approach the real monster, the man-eating tree, first reported in Madagascar and more recently in Portuguese East Africa. I spent some time in the British Museum library in London searching for the earliest known description of the tree, and I believe that I found it. Dr. Carl Liche, a German traveller was the author, and his account was published in the 1881 issue of the “Antananarivo Annual and Madagascar Magazine”, bearing the imprint of the London Missionary Society. This was printed in Antananarivo, the capital. The

missionaries neither vouched for the accuracy of Liche's story nor did they deny it. It was given, as newspapers say, "for what it was worth"; just an interesting narrative of a land rich in strange plants and animals. Liche also sent his narrative to Dr. Omelius Fredlowski, a botanist of Karlsruhe. Fredlowski secured further details from Liche and published a more detailed account, with comments.

"I had gone to Madagascar, the land of the lemurs and the man-eating tree, to visit Queen Ravalana II," wrote Liche. "A native guide named Hendrick heard that besides generous daily pay I was accustomed to reward liberally anyone who showed me something strange or unusual. This man persuaded me to visit the Mkodos, in the southeastern part of the island, among the hills covered with thick virgin forest. The

Mkodos are a primitive, naked race, with no religion beyond the worship of a sacred tree."

Liche declared that the Mkodos lived in caves hollowed out of limestone rocks. They were very small people, with few men reaching five feet in height.

At the bottom of a valley the guide Hendrich showed Liche a deep lake. A path from the southern end of the lake led them into thick jungle. They were followed by a rabble of Mkodas, men, women and children. Suddenly all the natives shouted: "Tepe! Tepe !" Hendrik stopped short. And there in a bare spot was a thick, cone-shaped tree like a pineapple eight feet high. The colour was dark brown, and it looked as hard as iron. From the apex of the cone eight leaves hung down to the ground, like doors swung back on their hinges. Each leaf had a sharp horny

point, and the face of each leaf was set with strong thorny hooks. These leaves were at rest when Liche arrived. They hung limp and lifeless, a peculiar green in colour, and they obviously possessed great strength.

From the base of these hideous leaves exuded a clear treacly liquid. Hendrick the guide said that this juice was intoxicating, and a person who drank soon went to sleep. When a human sacrifice took place a woman was forced to climb into the tree and drink. If the devil inside the tree was in a good humour the woman might be allowed to climb out in safety.

Meanwhile the Mkodos were chanting to propitiate the sacred tree. Their shrieks became wilder, and at last a woman was driven forward by men with spears. Thus menaced, she climbed the trunk slowly and stood on

the summit of the cone. The tree threw out feelers or tendrils which swirled about her. "Tsik! Tsik!" (Drink! Drink!) shouted the men. Stooping, she drank of the holy liquid. Then the whole tree came to life, the tendrils coiled round the girl's head like serpents.

Liche went on: "And now the great leaves slowly rose. Stiffly, like the arms of a derrick, they lifted themselves into the air and closed in on the victim with the silent force of a hydraulic press and the ruthless purpose of a thumbscrew. A moment more, and while I could see those great leaves pressing more tightly towards each other there trickled down the tree great streams of the honey fluid mingled with the blood of the victim. At sight of this the savage hordes round me yelled madly, crowded to the tree,

clasped it, and with cups, leaves; hands and tongues, each one obtained enough of the liquid to send him mad and frantic. Then ensued a grotesque and hideous orgy which turned into delirium and insensibility. At last Hendrick dragged me hurriedly away into the recesses of the forest, hiding me from the dangerous brutes. May I never see such a sight again ! “

Liche added that the leaves of the tree kept their upright position for ten days. Then he found them drooping again, and at the foot of the tree was a skull.

No doubt old Liche heard rumours of a man-eating tree and wrote his frightening tale for reasons best known to himself. It may have been a hoax, but I think he hoped to gain a reputation as an explorer. Obviously he did not see what he described. He overdid it with his story of the human

sacrifice. Scientists might have accepted a less dramatic story of a queer tree with bones strewn round the roots. The sacrifice stamps Liche as a liar.

Many sequels to Liche's tale have been reported and there have been many variations in different parts of the world. I have before me a London newspaper cutting dated February 1924, describing the ordeal of two botanists, Joseph Villareux and George Gaston, who were collecting specimens in a great swamp forty miles from New Orleans. Lost in the swamp for a week, they landed on a small island where a mysterious plant which they could not identify grew near the edge of the water. It looked like a grey palm. Fragrant yellow flowers growing near the foot of the tree attracted Villareux, and he was about to pick

them when several fronds of the unidentified tree seized him and drew him towards the main stem. Then creepers darted out and held him so tightly that he was unable to move.

Gastron came to the rescue with an axe, and at last Villareux was freed. Then they noticed that several small animals, squirrels and rabbits, had been caught and the life squeezed out of them. Gastron said that when his axe fell, the plant writhed in apparent agony, and red sap resembling blood oozed from the wounds.

The London "Daily Chronicle" which printed that fantastic yarn on the authority of a news agency (not Reuter, I hasten to add) also provided a solemn footnote reading as follows: "Carnivorous plants are by no means rare. Such plants are found all over the tropics, always in bogs and marshes."

This report brought to light a journalist, Mr. Arthur R. Amory, who claimed to have written the original man-eating tree story in India one wet afternoon in 1894. (Evidently he was unaware of the earlier Carl Liche effort.) Amory and his friends had been discussing a "pitcher plant" which they had seen catching insects; and Amory speculated on what might happen if that pitcher-plant grew up into a giant.

He pictured a member of a party of orchid hunters separating himself from his companions to go in search of a missing dog. At last he found the terrier in the grip of the gummy tendrils of the huge plant. He cut away one tendril after another with his sheath knife, only to find other arms shooting out and embracing him. In the end Amory's orchid hunter was

crushed remorselessly to death. Other members of the party found the skeleton lying beside that of his dog a week later.

It was pure fiction, but after it had been published in a Bombay newspaper the vivid story was quoted as fact all over India. Some newspapers invented details of their own to add to the verisimilitude. The story went on to Australia, the Far East, the United States and Canada, growing longer and more circumstantial as it crossed frontiers and oceans. Finally it reached England, and Amory was dumbfounded when he read one version in which the names of the orchid hunters had been filled in, with biographical details.

“Don’t talk to me about the monster Frankenstein created,” said Amory. “Frankenstein was a mere amateur.”

Mr. Salmon Chase Osborn, an American traveller and member of the Academic Malgache, went into the forests of Madagascar in 1924 to investigate the legend and summed up as follows: “I do not know whether this tigerish tree really exists or whether the blood-curdling stories about it are pure myth. Why should there not be such a tree? All the people I met – Hovas, Sakalavas, Sihanakas, Betsileos – from all these I heard stories and myths. I travelled a thousand miles down and across the island. Some missionaries say the tree does not exist, but they are not united in this opinion. Several missionaries told me that they could not understand how all the tribes could believe so earnestly in it unless there was some foundation of truth.”

Captain L. R. de la Hurst, a former Indian Army officer who had travelled widely in Madagascar, announced in a London newspaper in 1932 that he was leading an expedition to the west coast of Madagascar in search of the man-eating tree. "I can tell you this – it does eat human beings," declared Captain de la Hurst. "It is kept a very close secret, and natives are not too keen on pointing out the locality. Chiefs have told me that sacrifices are offered to the tree, and I hope to take cinema pictures of the ceremony. But I am not going to say much about it, or I may be regarded as a second De Rougemont."

Captain De la Hurst had said enough to arouse my interest, and I kept a sharp look-out for the results of his expedition. Unfortunately I heard no more of it.

The late Mr. Owen Letcher, South African mining authority, went to Madagascar in 1935 on a financial mission and made it his business to investigate the man-eating tree. Among his informants was Mr. Miles Carrol, an Australian mining engineer who had worked in Madagascar for more than thirty years. Carrol told Letcher that a witchdoctor had offered to lead him to a valley where two of the trees were growing. It would be necessary to present the witchdoctor with a few head of Zebu cattle, but he intended to accept the offer when he had time. Apparently he did not do so, for that was the last mention of the quest.

One theory which I mention only because of its romantic interest is that the man-eating tree was invented by the old Indian Ocean pirates, Kidd and the rest, at the time when they declared a

republic in Madagascar. They did not want anyone exploring their haunts, and possibly finding their treasures, and they relied on the tree to keep unwelcome visitors away. Too ingenious, I think.

I must now digress a little in order to examine from a different angle this legend which has fascinated me for so long. Three centuries ago there was a governor of Madagascar named Etienne de Flacourt who published a book describing a gigantic bird which laid enormous eggs. It was a bird like the roc of the "Thousand and One Nights", the bird that dropped stones on Sindbad's ship and sank it; a bird such as Marco Polo spoke of, capable of lifting an elephant. De Flacourt did not say he had seen this bird. It was a native legend, like the man-eating tree. At the time, even in the unsophisticated

seventeenth century, there were many who doubted De Flacourt's word.

Early last century a traveller in Madagascar named Sganzin found pieces of an enormous egg, and made sketches which he sent to the French naturalist Jules Verraux, who happened to be in Cape Town. Now we know, of course, that in Madagascar there was a gigantic, wingless bird standing twelve feet in height and called the *Aepyornis*; a bird which survived until the twelfth century A.D.; a bird that laid the largest eggs ever found on the face of the earth, eggs three feet in circumference. Of course the *Aepyornis* never devoured elephants, but it was a bird, not a myth.

Is there a tree in Madagascar which has some deadly property, something which might explain the man-eating tree legend? I think it is possible; and

I base this opinion on the strange but true story of the upas tree of Java, *Antiaris toxicaria*, the tree which contains a deadly poison. It was described by Friar Oderich in the fourteenth century, and gradually the story spread that this tree of death was powerful enough to kill anyone who slept within miles of it. The story was so persistent that in 1837 a Lieut-Col. W. H. Sykes, F.R.S., went in search of it. His guides led him to a valley of skeletons, *and there were human skulls among the bones*. There, too, was the upas tree.

Sykes looked round for some other cause of death, and he soon found it. Java is a land of volcanoes, which give out carbon dioxide. Dogs and chickens which Sykes left overnight in the poisonous valley were found dead in the morning. In calm weather the gas

accumulates in the valleys. Natives had blamed the poisonous upas tree instead of the gas.

I think there may be a poisonous tree in Madagascar, possibly in some unhealthy area where many untimely deaths have occurred. The bones of men and beasts scattered round such trees would be enough to serve as origin for a tale that still goes round the world and survives all ridicule.

Botanists agree that the flora of the Western Cape ranks among the richest in the world, but they cannot say how this wealth arose. You find more different species to the square mile than almost any other territory in the world yields; and many of these species are found nowhere else in the world. Yet the origin of this floral wonderland is still a mystery.

According to one theory, these plants are relics of a continent which existed before South America, Southern Africa and Southern Australia became separated. An ocean lay between the southern land mass and the northern lands, and so the distinctive flora grew up in the south.

Another theory points to the tropical zone as the birthplace, and lays down that the Cape flora moved southwards and became isolated at the southern tip by deserts. Professor R. S. Adamson, an open-minded botanist, has pointed out that the Cape flora includes a large proportion of African plants. Groups of plants closely allied to the Cape flora are found on the high mountains far to the north. One example which comes to mind is the protea which grows on Cameroon peak.

Those who attempt to solve the botanical mysteries of Africa sometimes find themselves facing greater dangers than the big-game hunters. I know a number of men who have gone in search of new plants, or rare species which could not be found although they had been described by old explorers. Those men really do work in the cause of science. The tales they have told me rank high among modern adventures and discoveries in Africa.

The great Dr. Rudolf Marloth, author of "The Flora of South Africa", had a young companion on some of his climbs and journeys in quest of specimens. That young man, Mr. Reginald le Sueur, was over eighty when he recalled his experiences for my benefit not long ago. "Perhaps I was accident prone, but everything seemed to happen to me," Le Sueur told me. "I

had narrow escapes from death again and again on Table Mountain while searching for flowers. Rocks broke away, just missed me, and went hurtling into space. Once I almost walked into a wicked slagyster, a spring-trap set for buck. I nearly stepped on a huge puff-adder, but managed to kill it. This was such a fine snake that the Cape Town museum displayed the skin for years. Above the Tokai plantation I ran into a pack of two hundred baboons. They could have torn me to pieces, but I kept still and they passed without seeing me. I found myself face to face with one of the last leopards on Table Mountain some time later, but it did not harm me.

“When I was twenty-two I climbed alone one morning along a ledge in a precipice, only to find that I could not move backwards or forwards. A crack

ahead of me was too wide to step across unaided. At that moment I heard a deep voice say: ‘Give me your hand.’ The man saved my life and climbed on without a word. I never saw him again.

“One foolish thing I often did was to jump over a fissure in the rock and grasp a tree-branch on the other side without making sure that it would hold me. Yet I had only one serious fall, when I fractured a bone in my leg, suffered from concussion and lost the power of speech for a time. But I suppose my worst moment came while gathering blue and pink water lilies in a vlei on the Cape Flats. I could not swim. When I fell into a deep hole another lad saved me just as I was going down for the last time.”

Le Sueur was entrusted with a special mission in 1902 when Sir Joseph and Lady Chamberlain were in Cape Town.

The visitors both loved orchids, and Le Sueur gathered red disas on Table Mountain and delivered them at the Alexandra Club. Unfortunately some titled society woman removed Le Sueur's card and attached her own.

Soon afterwards, however, Le Sueur cut out a block of turf containing disa plants and presented them to the Chamberlains. Some years later he called at the Chamberlain home in Birmingham and saw the disas flowering in a hot-house.

Some of the wild flowers which Le Sueur saw growing profusely have become rarities, or have vanished completely. Early this century few people gave a thought to preserving the botanical wonders of the Cape. Le Sueur has a memory of a white orchid with a strong scent which grew near the

Tokai road. Often he searched for it in later years, but always in vain.

A botanist and mountaineer of a slightly later period, with a great reputation, is Mr. T. P. Stokoe, collector of many species new to science. Stokoe often climbed with General Smuts. I think Stokoe's most remarkable achievement was his outing on his ninetieth birthday. He climbed all the peaks in a favourite botanical area round the Ratel River near Quoin Point, carrying an eighty-pound pack on his back.

Stokoe first set eyes on the Cape wild flowers in the spring of 1911, a wonderful year when the coast beyond Camps Bay was covered with oxalias and proteas, adonandra and gladioli. So lavish was the display that Stokoe thought he had wandered into a private garden. Malachite sunbirds darted

among the bushes. He knew the flowers of England, but here everything was new. Farther up the mountain the disas grew like a scarlet blanket. But in recent years Stokoe has visited these areas sadly, for the flowers and birds have gone and the land has been ruined by pine and eucalyptus.

However, that first walk nearly half a century ago turned Stokoe into a botanist. He worked with Marloth, located long-lost plants, discovered species new to science, and supplied Kirstenbosch with seeds. Thirty plants have been named after him. Caledon yielded the *Protea stokoei*, bright pink and six feet high; and the *Brunea stokoei*, even taller, a spectacular plant with grey buds which become fluffy red flowers. Many his new discoveries were made in the Hottentot's Holland mountains, and every year for thirty

years he camped at least once in Spinnekopkloof. It was there that he saw the evergreen shrub called *Priestleya calycina* regenerated after a bush fire in 1945 – a rarity which had never been recorded in that kloof before.

Stokoe is too old and skilful a climber to take unnecessary risks. One plant which Marloth had asked him to find, however, nearly cost him his life. This was *Glischrocolla lessertiana*, a heath-like shrub which no one had seen for many years until Stokoe glimpsed it on a narrow and perilous ledge in the Hottentot's Holland range. "I was lucky to get back alive with that specimen," declared Stokoe. "Never again do I wish to have such an insecure foothold."

Marloth was delighted with such important finds, of course. Once he

was lying ill in bed when Stokoe arrived with a rare klattia; and he was so pleased with Stokoe's gift that his symptoms vanished.

It was in 1922, on the Perdeberg near Kleinmond, that Stokoe made one of his greatest discoveries. This was the famous and beautiful new golden protea which was named *Mimetes Stokoei* in his honour. *Mimetes Stokoei* was a silver bush growing up to eight feet, with a magnificent collection of crimson and orange blooms shot with silver in the head. The silver leaves turned to gold near the flowering head. Stokoe found this marvellous thing in two places. One plant was sent to Kirstenbosch, but it died. Fire destroyed the main patch in a kloof, and a few others along a steep ridge disappeared. "I had the good fortune to discover a new species of

protea, and the bad fortune to see it peter out," says Stokoe sadly. "It is almost certain that the golden protea is now extinct. Once I found it in a flower-seller's basket in Adderley Street, and often I visited the mountain summit where it grew. But I shall never set eyes on this protea again."⁶

Stokoe, a true mountaineer, has always specialized in the plants of high altitudes. He has approached many farmers in his time for permission to search their land for plants, and visited parts of those farms which were entirely unknown to the owners. In the early days few of the farmers believed

⁶ On his ninety-first birthday in February, 1959, Mr. Stokoe set out once more in the Hottentots Holland mountains to rediscover *Mimetes Stokoei* but failed to find it. He was caught out in heavy rain and taken to a nursing home, where he died some weeks later.

Stokoe's story that he was searching for flowers. They were sure he was after gold.

Old camper that he is, Stokoe has never forgotten a rainy spell in the Kogelberg when he had two fine days out of nineteen. His tent blew down, his sleeping-bag filled with water and his legs were frozen. It was a long time before he could dry his bedding and go to sleep. Yet this grand old man of the mountains still prefers the open air to a comfortable bed in Cape Town. He goes on climbing and camping, striving always to find *Mimetes Stokoei* again. The man who has collected sixteen thousand botanical specimens would regard that as his greatest triumph.

Many a garden in the Cape displays the magnificent golden arum lily, but few gardeners know the tale of adventure that led to this discovery. It was during

a native campaign in 1883 that the burghers found these lilies growing wild in the north-eastern corner of the Transvaal. They carried bulbs home in their saddle-bags. When the golden arums bloomed in Pretoria gardens everyone wanted them and high prices were paid for the few bulbs available.

Charles Ayres; a Cape Town florist, heard of the discovery and in 1885 he decided to fit out a secret expedition to the remote territory in search of bulbs. The only man who knew what Ayres was after was James Clark of Pretoria.

Ayres had a number of reliable Swazis with him. He returned safely with about one thousand bulbs. So confident was Ayres in his botanical treasure that he took the bulbs to Europe, selling some in England and others in Holland at an average price of twenty pounds a bulb.

James Clark heard of this wonderful deal and sent an expedition of his own to gather arum bulbs. His man also returned with about one thousand bulbs, which were shipped to Holland. Unfortunately the natives who had collected the bulbs had pulled out the flower stalks so that the bulbs were “blind”; they grew well but bore no flowers. Sixty bulbs were complete, and those bulbs paid the expenses of the long trek. Fortunes were made not only by collectors but also by florists overseas in the early days of the golden arum boom.

Another botanical oddity growing in a far corner of South Africa is the Mkambati palm which is found only in a restricted area in Pondoland. This is a member of the coconut palm family, but the trees are dwarfs and the fruit is the size of a walnut and contains no

milk. Natives used to brew a strong palm wine from the nuts, but the few groves have been proclaimed a, “national monument” to protect these rare trees. Coir and foliage of the Mkambati palm are also on a miniature scale. Botanists cannot explain this dwarf form.

One Sunday morning I was walking along a ridge in Johannesburg, the nature reserve known as The Wilds, with my old friend and shooting partner A. P. Cartwright, when I saw a clump of tall-stemmed Mujaji cycads with dark green leaves. They were named after the “rain queen” of the Soutpansberg, and they are among South Africa’s most ancient plants.

I suppose the great fascination of these survivals lies in the picture they give us of our world before man appeared on the scene. Darwin called such

plants “living fossils”, and nowadays any living creature of the dawn world, such as the *coelacanth*, is described in this way. Cycads are the most interesting ancient relics clinging to life in the plant kingdom, for they still look very much as they did millions of years ago, when dinosaurs touched their leaves. They rank as the most primitive of all the seed-bearing plants; and they are interesting, too, as rarities; for only one species is common and some species in the Union are almost extinct. In recent years they have received the protection they deserve. Only since World War II have most of the sparse, remote, scattered cycad groves of South Africa been located by experts and mapped.

Miss M. Courtenay-Latimer, director of the East London Museum, was a member of an expedition in 1947

which travelled thousands of miles to compile the first accurate classification of South African coastal cycads. Among the extremely rare cycads which she identified was *Encephalartos caffer*, thought to have been lost for ever because native witchdoctors once used it in their medicines and almost exterminated it. The species had not been reported since 1902, and only a few tiny colonies have survived. Veld burning and the plough have killed off many rare cycads.

Pollination of cycads is still something of a mystery. Wind was responsible, according to an old theory; but Miss Courtenay-Latimer found weevils in all the cones she examined. Baboons and toucans distribute the seeds.

No doubt some of you have seen cycads growing in public gardens and

thought they were palms. Dr. Carl Thunberg, the old Swedish traveller, was the first to describe cycads at the Cape, and he made that mistake. "The bread-tree is a species of palm which grows on the hills below the mountains in these tracts" (in Langkloof), wrote Thunberg. "It was of the height and thickness of a man at most, very much spread and single. I have sometimes seen two or three stems spring from one root. It is out of the pith (medula) of this tree that the Hottentots contrive to prepare their bread ... I observed that the tree stood in dry, sterile places between stones and grew slowly."

Indeed it grows so slowly that no one thinks of sowing the seed. Many specimens have been uprooted, and that is why certain species have become uncommon in their natural habitat. However, there is something to be said

for placing a few selected cycads where they can be seen by the general public. One remarkable specimen grows outside the Commissioner's office at Stegi in Swaziland, its story inscribed on a bronze plate: "Cycad *Encephalartos lebomboensis*. This indigenous tree was growing at the time of Queen Elizabeth (1568-1603) and replanted here to commemorate the Coronation of Queen Elizabeth II – 2nd June, 1953."

Kirstenbosch has the finest collection of cycads, and they are to be found in the red soil behind the so-called "Lady Anne Barnard's bath". Most of the South African species are there, one eleven feet high. One rare *Encephalartos latifrons* is probably many centuries old and the largest known specimen. Three species of the *Stangeria* cycads are also on view,

and these resemble ferns, with underground stems and small cones just above the surface. One of them was named *Stangeria paradoxa* to show how surprised the old botanist was when the plant he had identified as a fern turned out to be a cycad.

Incidentally the *Encephalartos* species (from the Greek, “cake in the head”) received that name because the seeds are used as food. Baboons are great raiders of cycad trees, for they know when the cones are ripe. *Encephalartos horridus*, the spiky cycad, repels invaders easily enough, but it is in danger of becoming extinct.

Cycads love moist places. When that inspired naturalist, the late Eugene Marais; reported cycads in the dry Waterberg area of the Transvaal, the botanists thought he had made a mistake. However, he had sent a

specimen to Dr. Marloth and that was placed in the national herbarium in Pretoria. Long afterwards Miss I. C. Verdoorn, a niece of Marais, found it there and went in search of the cycad. Sure enough, hundreds of cycads were growing on the mountain where Eugene Marais had studied the ants and the baboons. So his niece named the species after him, *Encephalartos eugene maraisii*.

Botanists estimate that the first cycads appeared on earth about two hundred million years ago. They remained with us because they resisted drought, insects and disease, while they poisoned those plant-eating animals which might have destroyed them. Once there were great cycad forests, which turned into coal. Now the cycads survive only in little patches, usually

far from densely-populated areas. They are rare, but they survive.

CHAPTER 17

MYSTERIES OF BIRD MIGRATION

SPRING IN the south, and the migratory birds are racing into South Africa by the million. Stripe-breasted swallows from their unknown breeding places somewhere in Africa. Steel blue swallows from Europe, heading inevitably towards the same mud nests on the same stoeps year after year. Here is a riddle of Africa indeed, and the drama mounts as summer approaches.

Now the golden orioles are coming in with their loud whistles, seeking the high trees where few human eyes can see them. Harriers are making for the marshes. White storks appear from the north in huge flocks, roosting on hillsides and trees. Shy black storks head for their familiar caves and sometimes for the Cape vleis. House martins and swifts, night jars and

cuckoos, sand plovers, curlew sandpipers from Russia and other waders are all winging into the land of the sun.

I have personal memories of the finest bird navigator of them all, the greater shearwater. This brown-backed sea wanderer has an enormous range which includes the Cape of Good Hope. The breeding place of this fine petrel was unknown early this century; then a skin reached the South African Museum from the Tristan da Cunha group and the secret was out. I saw the birds and tasted their eggs while I was at Tristan. The islanders used to kill many thousands of petrels for meat and cooking fat every year, but some protection has now been enforced.

Greater shearwaters never alight on land save when they return to the Tristan group and its southern outlier, Gough Island, to nest in underground

burrows. They have been reported in the Arctic and the Antarctic, and along the coasts of North and South America, Europe and Africa. Yet they find their way home unerringly to the little group of mid-ocean islands, fifteen hundred miles from the nearest continent.

Wilson's petrel breeds on the Antarctic coast and migrates northwards almost to the North Pole. Arctic terns fly from the Arctic to the Antarctic pack-ice with only a glimpse of West Africa on the way. One young Arctic tern ringed in Greenland travelled eleven thousand miles in sixteen weeks and was then recovered in Durban, Natal. Such journeys by seabirds make the famed carrier-pigeon look like a stay-at-home. In fact, the long-winged frigate bird has been domesticated and used to send messages. However, I still grant first place to the greater shearwater. It is

more difficult to make your landfall on a lonely island than it is to reach the ice-barrier or a continent and then cruise up and down until you find the landing ground of your desire. Moreover, a ringed shearwater has covered three thousand miles in twelve days.

It has been suggested that birds which migrate across the oceans have inherited the memory of land bridges which sank long ago. This is fantastic. Birds cross the sea by many routes, where no land existed in long-past geological ages.

How is it done? How do all these birds, large and small, navigate across land and sea? Why do they cover many thousands of miles while other less adventurous birds stay at home? Why do they return? These are mysteries which have gripped scientists and ordinary bird-watchers for centuries.

Migration, however, is no longer the deep mystery it was even last century, though the final truth still seems to recede as man's knowledge increases.

Possibly the first bird migrants were driven south during the glacial period millions of years ago when the ice-sheets spread over vast stretches of North America and Europe.

To this day most of the migrants breed in the north in summer and fly south when winter comes. Other movements have been noted, however; and there are birds that move between Madagascar and the African mainland, or between the Transvaal and Angola. Some of the seabirds of the Southern Ocean fly right round the world. But the great, classic migration routes lie from north to south, along the paths they were forced to follow when the advancing ice-cap covered their homes.

I find that theory plausible, but I cannot believe that the birds' "ancestral memory" of their old homes in the north was so vivid that they hastened back when the ice melted. We must look for some other stimulus.

Migration baffled the wisest philosophers for centuries. Primitive man must have known that winter was at hand when the swallows of Europe departed; yet as recently as the late seventeenth century people thought that the swallows buried themselves in mud at the bottom of lakes and hibernated like bats. Many believed that storks flew to the moon. It was also stated that small birds rode on the backs of larger ones, such as cranes.

When the migrants were observed far from home, the theory grew up that the birds had memorized their routes during previous flights. This is true of

some birds, but false when migration is taken as a whole. Even the slightest study of migration brings it home to you that there are not many fixed rules. Observation of a number of species is necessary, and then pre-conceived opinions are often shattered. For example, finches do migrate in flocks with the older birds guiding the young. They are recognized following the same course year after year and turning in the same places.

Many species of birds seem to prefer cruising along coasts and rivers, and they keep to the valleys rather than climb over the great mountain ranges. Observers in lighthouses and ringing experiments have proved that swallows bound from Europe to South Africa migrate accurately along definite routes. Swallows like the Nile Valley. Sandwich terns, on the other hand, fly

across the Bay of Biscay, past Madeira and round the Senegal coast just like mail ships heading for the Cape. Southbound shrikes, swifts and nightjars go through France, Spain and the Sahara.

Natural landmarks do come into the picture, and for a long time memory of such landmarks was regarded as the answer to the migration riddle. It was argued that the bird's-eye view of a landscape was so immense that there was little chance of losing the way. So there was no such thing as instinct, no mystery at all. Nature had endowed the birds with extremely sharp eyes, and the birds of passage found their way easily.

This was the truth, but not the whole truth. Some migrants fly very low, and there are certain seabirds which travel just over the wave-tops. Many experi-

ments have been carried out, and it can now be stated emphatically that the “photographic memory” theory is not the solution of the mystery. It is true that vision plays a part; it is true that when nearing home the bird’s memory of landmarks helps it to find the nest. But other faculties must be used by birds flying over hitherto unknown routes without landmarks. Many young birds migrate for the first time unaccompanied by parents or more experienced birds.

Swallows have been transported in hundreds from their nests, taken away in many directions, and released in sunshine and fog. Most of them found their way home. One swallow covered two hundred and fifty miles in twenty-six hours.

Carrier pigeons have been used in experiments more often, I think, than

any other birds. The rock pigeon, from which all the fancy breeds have sprung, was not a migratory bird; and this suggests that all birds must possess the power, and that it can be developed by skilful breeding. Many wild birds, of course, display the power of navigation in a far higher degree than homing pigeons.

Everything possible has been done to bewilder homing pigeons. They have been transported under a general anaesthetic, but they came home safely. Long ago it was suggested that birds gained their sense of direction from the magnetic poles. Pigeons have flown home, however, with magnets attached to their wings in such a way that all sensitivity to the earth’s magnetism would be destroyed.

As an officer in the South African Air Force during World War II, I attended

a course in the use of homing pigeons. Each aircraft in my squadron carried four pigeons while flying over the ocean. The instructor, an amateur pigeon fancier in civil life, showed us how to wrap a pigeon in paper and throw it down hard to take it clear of the slipstream. This expert denied that pigeons would not fly across the sea, though he had noted that they always took the shortest route to the mainland.

I believe the officers in charge of pigeon training set up a world record at that time when they sent two pigeons (both one month old) from Cape Town to Pretoria. They were kept in Pretoria for two and a half months and then released. One of them reached its loft in Cape Town safely. As a rule, a pigeon undertakes short journeys at the age of four months,

and takes three years to reach the summit of its performance.

Pigeons were taken up to ten thousand feet and released in overcast weather. All returned safely "flying blind". Migratory birds are usually greatly handicapped by cloud. Pilots of aircraft carrying pigeons were advised to release a pigeon and take a compass bearing if they were forced down and lost in a desert. The line of the pigeon's flight would always show them the way home. It has been proved that homing pigeons have wonderful powers of orientation. They have been timed after release in unfamiliar surroundings. In ten seconds they are on their way.

"Photographic memory" breaks down completely when you realize that if you take homing pigeon's eggs of a good strain and hatch them a hundred

miles away, or even more, the young birds will sometimes return to the loft where the eggs were laid. That is a situation which has defeated every experiment and every theory, except perhaps the “group memory” theory. And when you talk about group or ancestral memory you are in reality only giving the mystery a name.

Most conspicuous of all the birds that migrate to South Africa is the majestic and well-beloved white stork. These huge, legendary emblems of faithfulness and love have become so accustomed to the presence of man that they seek his protection at breeding time. They are honoured guests among the chimney pots of Denmark and Holland, and they are fully protected by law wherever they may settle in the Union. Farmers know that the *sprinkaanvoel* can be relied

upon to clear the veld of locusts and other unwelcome insects.

Storks have not remained immune from the probings of science. Between the wars, observers at the famous Rossitten bird observatory in East Prussia and other places ringed a number of storks to discover their routes to Africa.

It was found that the storks of Hans Andersen’s country and most of Western Europe fly south over France and Spain to winter in Morocco. Others travel onwards in a south-easterly direction across the Sahara. This route has not yet been accurately plotted, but it seems that they touch Lake Chad, sight the Congo River and finally link up with other southbound storks in East Africa. Storks of East Prussia and Hungary, however, follow an eastern route through the Balkans,

across hostile Turkey (where ignorant people snipe at them), and then down the Nile Valley and East Africa to Central Africa or the great cul-de-sac of Southern Africa. Storks and other birds show wide variations in the migration urge. Some go on and on to the southern tip of Africa; others settle down in winter quarters far from the Cape Province.

Rossitten observers transported one hundred and fifty young storks born in Eastern Europe to Essen in the west. They were ringed and released after the usual migration time, with no old storks to lead the way. Reports from various points along the migration routes proved that the majority of the storks had not followed the western route to Africa (as some scientists had expected) but had returned to the eastern route. Two storks came down

in France, where they had been following a path of their own. These results appear to prove that the inherited urge is stronger than any other factors, including wind and weather. Dr. Heinroth, a well-known ornithologist, declared that the storks never followed the old routes as closely as some people believed. He also suggested that some migrants followed the birds of other species when flying south.

Storks have been timed again and again on their flights to South Africa, and here new discoveries have created new mysteries. The top speed of a stork (proved when followed by aircraft) is just under fifty miles an hour. Storks take two months on their southward journey to South Africa each year, but only one month to return. Is it because the task of feeding

a growing family in the north has tired the great birds, so that they cover the distance of six thousand miles in leisurely fashion on the way south? Are the frogs and insects of South Africa more nourishing than the diet which the Low Countries provide? Dr. R. Bigalke, the Transvaal zoologist, has declared that the storks hurry back to Europe to breed.

Storks appear to be leaving Europe and becoming more numerous in Africa. It was a sensational event in the bird world, however, when Dr. Austin Roberts reported in November 1970 that he had found a white stork shading three young ones with its wings in a clumsy, typical nest in a blue-gum tree on the road between Oudtshoorn and Calitzdorp. The owner of the farm, who was unaware of anything unusual, informed Dr. Roberts that the pair of

storks had nested there for seven years. When winter came they had remained with their young instead of migrating. This was the first recorded example of white storks breeding in South Africa, and no one had considered it worth mentioning until the author of "The Birds of South Africa" happened to pass that way. Since then, another pair have nested in the Orange Free State. No one has been able to explain why these birds should have disobeyed the age-old laws of migration and ignored their own hereditary instincts.

Migration is still a mass of riddles. It sounds plausible when you say that the birds migrate because winter diminishes their food supply; but when you go into the matter it is found that the birds depart long before their food has vanished. It is warmer in the south, but how on earth are young birds to

know that? And in any case the great migration starts before the cold weather sets in. Why should a migratory bird desire to escape the winter when, for countless generations the species has never experienced the hardships of winter?

Scientists have worked on a sex theory, and sought the answer to migration in some phase of the reproductive process. Critics soon proved that sexually immature birds, and even castrated birds, also migrated. You do not destroy a theory with such an argument, but the mystery remains. Cage a migratory bird from birth, and it becomes more and more fretful as the time of migration approaches. Place it in a room without windows and watch the direction in which it points and beats against the bars. That is the line of flight. You may breed migratory

birds in captivity, but you will never crush their longing for the great spring flight.

Dr. G. J. Broekhuysen, the South African ornithologist, admits that little headway has been made in solving the migration problem. He thinks the stimulus may be due to bodily changes, and that climatic reasons are secondary. This authority also believes in a "compass sense".

I think the belief is growing among scientists that birds possess special senses unknown to humans. Dr. David Katz, the great German psychologist, declared: "There are many accounts of natural migrations of birds which cannot be explained except by assuming some unknown factor."

Dr. G. V. T. Matthews, the Cambridge zoologist, believes that birds navigate

by the sun, just as human beings have done for centuries. No need to look for a sixth sense when a time sense and an occasional glimpse of the sun will do the trick. It has been proved that both humans and birds have clocks in their brains; in fact, the clock is so accurate that it might almost be called a chronometer. On its breeding ground the bird becomes aware of the “sunarc” and the sun’s position on it at various times. When it flies away, the bird measures the angles and consciously or unconsciously fixes its position like a mariner with a sextant. At night the seabird may follow the course which it has set itself at sunset, checking its position by the moon and stars. Or it may rest on the surface until dawn.

I like the sun theory because it fits a number of established facts and does not fall back on the irritating word

instinct, which is no explanation at all. The known facts are that migratory birds do tend to lose their way when they cannot see the sun – in cloudy weather and in dense fog. It is not too much to expect of a bird that it shall know when it is east or, west of its destination, even when its home is a mid-ocean island. Tristan da Cunha, the difficult example I have quoted, is a volcanic cone over seven thousand feet high. Possibly the surface of the ocean reveals signs of land which the keen eyes of a high-flying bird would detect. Thus the greater shearwater might not have to waste much time exploring the South Atlantic when it returns to its island home.

Migration does mean abundant food and warmth at the end of the flight, but it is a dangerous adventure. Many perish on the way. They have no

weather reports to warn them of sandstorms in the Sahara. During one snowstorm, migratory birds were killed at the rate of five thousand to the mile; that was the count when the victims were washed up on the beaches of a lake in Europe. Swallows die by the hundred thousand when the weather is too cold for them.

Many keen observers have noted that the birds which migrate southwards from Europe do not rush off in a frenzy. They become restless, like the caged birds I have mentioned, but they drift off in leisurely fashion. As the sun is in the southern half of the sky it is natural that they should head in that direction.

The rush back to Europe at the end of the southern summer has also been studied. This is an urgent affair. It has been suggested that the birds are

craving for certain vitamins which are found in the spring vegetation of the northern hemisphere. Analysis supports this theory. March on the South African coast, and seabirds from the stormy isles of the great southern ocean are coming in towards the mainland for the winter. Petrel and shearwater, majestic albatross and sooty tern – they will need all their powers of navigation to find their misty and sunless homes again when they return. And as these seafarers approach South Africa the swallows are about to leave for the north. The old, mysterious cycle is at work again, the ancient urge is felt – the urge that is known to millions of birds though mankind is still left guessing.

CHAPTER 18

WILD ANIMAL RIDDLES

IT WILL be a long time, I hope, before Africa says farewell to the giraffe. Large troops survive, all the way from the Sahara south to Bechuanaland and South West Africa. These gentle creatures, tallest of all the mammals, are also creatures of mystery. I would like very much to meet a naturalist who could give me a convincing explanation of the process by which the giraffe acquired its long neck.

Charles Darwin made one of his most serious blunders when he tried to solve this problem. He pointed out that the whole frame was beautifully adapted for browsing on the higher branches of trees, and declared that the highest browsers – those able during droughts to reach even an inch or two above the others – were preserved: Thus the

giraffes with elongated necks intercrossed and left offspring with the same bodily peculiarities; longer legs and necks. The short-necked giraffes perished.

Closer study would have convinced Darwin first of all that the giraffe is not essentially a desert animal, and that it does not owe its survival to the ability to graze on high acacia trees. Wherever the acacia grows, there you find grass and low bushes. Moreover, many of these bushes are so hardy that in times of drought they go on providing food after the acacias have died.

Darwin also overlooked the fact that female giraffes are, on an average, two feet shorter than the males. Thus, if this particular evolution theory had been correct, all the females would

have died and the race would have become extinct.

Giraffes flourish and breed in zoos. No doubt Darwin would have been surprised to learn that statistics (which were not available in his day) have proved that giraffe parents with particularly long necks do not necessarily produce youngsters with necks longer than the average. They do not “breed true”. So that Darwinian idea goes by the board, as many another has gone in the century that has passed since Darwin published his theory of evolution.

Lamarck, the French zoologist, also studied the giraffe’s neck. He was an old man when Darwin was starting his career; yet some scientists prefer Lamarckism to Darwinism. According to Lamarck, animals acquired additional organs because they wanted

them. The giraffe grew long fore-legs because it was continually reaching up for its food, and the neck had to grow to keep in proportion with the legs. If you watch a giraffe bending down to drink or eat grass you will see that the neck has not kept pace completely with the legs. Only by spreading the forefeet wide apart can the giraffe reach ground level. Lamarck came much closer to the truth than Darwin on that point.

Nevertheless, both Darwin and Lamarck based their theories on the erroneous idea that the giraffe was a desert animal. So the mystery of the giraffe’s neck has still to be explained. Some modern naturalists have suggested that the giraffe grew taller and taller while looking out for the lion, its hereditary enemy. Another school of thought agrees that the lion danger was responsible for the long

legs, but that the giraffe acquired them so that it could escape. I cannot follow this argument, as the lion can do fifty miles an hour whereas the giraffe's long legs enable it to reach a top speed of just over thirty.

Northern giraffes are taller than the southern species, and a nineteen-footer has been recorded in Kenya. Among the strange freight regulations of several African railways you will find an item reading: "Giraffes measuring more than thirteen feet in total height cannot be accepted for transport." Fairly obvious, of course. More than one captured giraffe, travelling by train for some distant zoo, has lifted its long neck at the wrong moment and met death in a tunnel or beneath a bridge. Cecil John Rhodes himself lost a giraffe that way; a splendid Rhodesian giraffe that would have looked well in

his private zoo at Groote Schuur. But the people who railed it from Rhodesia forgot all about the Hex River tunnel, and so the giraffe ended up in the South African Museum.

Along the Kenya and Uganda railway line, where travellers often see giraffes, the telegraph poles have had to be raised to prevent almost daily collisions. A few giraffes are still killed by trains. The glare of the headlights fascinates and then blinds them as they stand between the rails.

Giraffes are sociable animals as a rule, and they will graze with antelopes and zebra when no others of their kind are in the neighbourhood. It is said that a female giraffe will set up a nursery for her own and other young giraffes. Though the story has aroused much sarcasm, a female giraffe has been observed with nine youngsters round

her, and not another full-grown giraffe within a mile of this charming spectacle.

All the old books by hunters and naturalists state positively that the giraffe is dumb. Some say it has no vocal chords. In recent years, however, this traditional and wide spread belief has been shaken. I have found a police statement describing the capture of a young giraffe near Nurugas in the Grootfontein district, South West Africa. When ridden down by two white constables it bleated like a calf and lashed out with its fore-feet.

From other parts of Africa comes even more convincing evidence. Commander Logan Hook of Nanyuki, Kenya, observed forty-five giraffes on his farm and declared: "It is an indisputable fact that giraffe from birth to five months bleat like calves, then

become mute. Mr. C. T. Astley Maberley, naturalist and artist, heard one or two giraffes utter a strange noise near his car in the North-Eastern Transvaal. Other witnesses have referred to giraffe sounds as a bellow, a bawl, a whistle, a rumbling grunt, a blowing, puffing and whiffling.

Kalman Kittenberger, who collected zoological material for many years in East Africa on behalf of the Hungarian National Museum, was another experienced hunter who believed in the dumb giraffe. He said it would even suffer the greatest pain without a murmur. However, one of his trusted native followers assured him that young giraffe sometimes called out when they were hungry, making a noise like sheep.

Such sounds cannot be common, or the authorities would never have been

so positive about the silence of the giraffe. Selous once said that he had never heard a giraffe utter a vocal note. Colonel C. R. S. Pitman, the famous Uganda game warden, was of the same opinion. "No one is likely to quarrel with the statement that the giraffe as a rule is mute," Pitman wrote: "I have never once heard one, either old or young, utter a sound."

All the experts were wrong about the voice of the giraffe. Darwin was wrong about the neck, but he was right when he classed the giraffe among the "living fossils", like the cycad plants I have described elsewhere. It is a fantastic survivor of the animal world of ten million years ago, when giraffes had short necks and branched horns. The only first cousin of the giraffe still living is the okapi, that mysterious creature of the Congo forests which

was unknown to white people until early this century.

Wherever you go in Africa, especially in the remote places, you hear of strange and fabulous animals or those "fossils" which have come back to life. Zoologists are naturally sceptical about such reports, and often they are sarcastic. They say that the okapi was the last of Africa's mystery animals, and nothing as large as that remains undiscovered.

Even the identification of a new subspecies of small mammal is regarded as a triumph among naturalists. I have good reason to remember such an event during an expedition into a far corner of South West Africa. One of the museum collectors discovered a little rodent with marked differences, and he named it after me!

So the quest for new, strange and marvellous creatures goes on, stimulated by dramatic reports. Sometimes it is possible to find an explanation for the stories told by reliable people. Often the mystery lingers. Among the great animal mysteries of South Africa during the first half of last century was the unicorn legend. Several famous travellers investigated the reports, and after studying all the evidence I have formed a theory.

You will find the first reference to the unicorn in the “Natural History” written by Pliny the Elder nineteen hundred years ago. The unicorn was the first mystery animal, and it came down gloriously almost to our own time. (Who knows, it may crop up again.) The unicorn appears in the Old Testament: “Will the unicorn be willing to serve thee, or abide by thy

crib? Can'st thou bind the unicorn with his band in the furrow? or will he harrow the valleys after thee?” Apparently this reference was due to an early error in translation, a blunder on the part of the learned Seventy who translated the Old Testament from Hebrew into Greek and introduced the unicorn instead of the wild ox. Later translators perpetuated the error. And so for millions of people the unicorn became a real animal.

Was there ever a fierce, one-horned animal resembling the unicorn? I rule out the rhinoceros, of course, because even Marco Polo and the old travellers knew that the rhino was not the legendary unicorn. Yet the unicorn story cannot have been entirely without foundation. Many wild lands had their unicorns long ago, and the

South African reports make fascinating reading.

John Barrow, the English explorer and diplomat, made special efforts to discover the unicorn in the Graaff-Reinet district early last century. He was impressed by the description given to him by Adrian Versfeld, a Camdeboo farmer, of an animal, shot in the Bamboesberg, and unknown to any colonist who had seen it. The animal was said to resemble the quagga, but was larger, yellowish in colour with black stripes. In the centre of the forehead was an excrescence of a hard, bony substance covered with hair and ten inches in length.

Farmers told Barrow of a cave, probably in the Bamboesberg, where a Bushman painting depicted a unicorn. He found the cave and cleared away the brushwood so that the light fell on

a painting of a beast with a single horn. Unfortunately only a part of the unicorn could be seen, as an elephant had been superimposed on it.

Lichtenstein, the German doctor who travelled in the Cape at the same period as Barrow, also mentioned the unicorn. Lombard, a Swellendam farmer, informed Lichtenstein that in 1790 he had taken part in the search for survivors of the lost treasure ship Grosvenor; and he had heard of the unicorn while he was in the native territories. He believed in it, but Lichtenstein did not. General Janssens, the governor, was so anxious to clear up the mystery that he offered a reward of a strong new wagon with a team of oxen and full equipment to anyone who brought a complete skin, with the horn and skull-bone, to Cape Town. There is

no record of anyone claiming the reward.

Vanderkemp the missionary heard of the unicorn in “north-east Kaffirland”. He said that the Imbo people had reported it to him as a very savage animal, greatly feared. It overturned kraals and destroyed huts. They knew the rhinoceros well, and assured Vanderkemp that this beast was entirely different.

Natal unicorn rumours in 1840 were recorded by Captain Grayson. A hunter had drawn a picture of a unicorn, and the natives confirmed the presence of the animal. “*Fana ihashe, mpondo enye*”, they said. “Like a horse, with one horn.” Zulus told a Natal settler named Osborn about a century ago that they had reached an unknown swamp on a plateau in the Drakensberg range. There they had disturbed six animals,

dark brown in colour, and the size of a blesbok. They were vicious, and several Zulus were killed. Each animal had a long, straight horn on the forehead.

Such is the evidence, and I do not care to dismiss it as pure imagination. I think many reports may be explained by freaks and accidents. Anyone who has seen a gemsbok with one horn missing has seen a creature which, in the distance, would bring the fabulous unicorn to life. A gemsbok with one horn twisted round the other was shot in South West Africa some years ago. Who can say that among the millions of antelope born in Africa there have not been a small percentage of freaks born with one horn?

If that does not satisfy you, I have evidence, ancient and modern, of a

custom among certain African tribesmen of producing “unicorned cattle”. Pliny and other old writers spoke of one-horned cows and bulls in the land of the Moors and Ethiopia. I understand that the Dinkas of the Nile and certain native races in South Africa perform the simple operation to this day. The two horn buds are cut and trimmed flat and placed together over the “seam” of the frontal bones, so that they grow into a single horn spike sheathed by a single horn.

Such cattle become the leaders of their herds. They also help to explain a legend that could not have lasted for nineteen hundred years without some sort of unicorn to keep the story alive.

Dinosaurs and pterodactyls died out in Africa about one hundred million years ago. I cannot bring myself to

believe in “living fossils” of these species; yet I am unable to explain some of the extraordinary stories of prehistoric land monsters and huge flying reptiles which have been told in good faith by responsible people in recent years.

Small flying snakes exist in Asia, but not in Africa. They are gliders rather than true aviators, holding their bodies rigid, drawing in their stomachs and launching themselves from trees. They land gently. But this is not flying as the pterodactyl knew it. Now listen to the tale of the flying snake of Kirris West, a farm nearly sixty miles due east of Keetmanshoop in South West Africa.

Sergeant L. O. Honeyborne, a most observant man with long experience of the territory, was on duty in the Keetmanshoop police station early in

1942 when he received a telephone call from Kirris West asking him to come to the farm. He drove out and found the whole neighbourhood talking about a “dragon” which had attacked a boy of sixteen. And he was shown the spoor of the beast – loops and “skid marks” as though the brakes had been applied suddenly in a car driven at high speed.

Honeyborne took statements with the accuracy of an old policeman. First there was an Ovambo shepherd who had reported a huge flying snake as thick as a man’s thigh. “It flew from cliff to cliff and frightened the karakul sheep,” reported the shepherd.

Michael Esterhuise, aged sixteen, a farmer’s son, had seen the snake a few weeks after the shepherd’s report. It was lying in a crevice among the hills with its head and about two feet of the

body visible. Michael threw a stone at the creature, and it growled like a dog. He retreated and told his family about the adventure.

Mr. Ras Esterhuise (the father) and an elder brother set out with rifles in search of the snake next day, and found the typical spoor. Michael saw the snake again while he was gathering wild honey from a *krans* in the hills a few days later. But the most dramatic encounter came on January 13, When Michael was watching the sheep at the foot of a koppie.

“I heard a sound like wind blowing through a pipe, and suddenly the snake came flying through the air at me,” Michael declared. “It landed with a thud, and I threw myself out of its path. The snake skidded, throwing the gravel in all directions. Then it shot up into the air again, passing right over a small

tree, and returned to a hill-top close by.”

Michael ran for his life, then felt dizzy and collapsed among some bushes. The sheep returned to the kraal without him, and so Michael’s father and brother hurried out, wondering whether they would find him alive. “We remembered the snake, and we had almost given up hope when we saw him lying on the veld,” the father told Sergeant Honeyborne. “Michael looked ghastly – his eyes were terrible and his jaws were locked. Hours passed before he could speak.”

Ras Esterhuise organized a hunt next day. Hermias Strauss and other neighbours arrived. A dozen armed men started out in search of the snake. They found its lair in the hills – and the bones of the lambs and buck it had eaten. On seven or eight hills they

discovered the spoor, which indicated a snake of abnormal size. But the snake did not appear that day. The scene of the attack on Michael Esterhuise was enclosed with a thorn bush kraal so that the spoor would not be disturbed.

Honeyborne checked the evidence as far as possible, and estimated that the snake must have been about twenty-five feet in length. The hill from which it had “flown” to attack Michael was about three hundred feet high. The gravel where the snake had landed had been flung out of the ground to the depth of one inch.

What was the snake that frightened Michael Esterhuise and baffled Sergeant Honeyborne. I can only imagine that it may have been an exceptionally large rock python. Along the lonely reaches of the Orange River (which runs about one

hundred and seventy miles to the south of the farm) many rock pythons are found, and some are twenty-five feet in length.

Pythons attack at such speed that anyone might well be forgiven for thinking that it had flown to the spot. It makes for its prey like an arrow from a bow, and the thrust is carried out at such high speed that anyone watching would have only a blurred vision. They can and do dive out of trees, and that is what Michael Esterhuise probably saw – a huge python launching itself from a tree. In that terrifying second the python may well have seemed to have flown from the top of the neighbouring koppie. Pythons also depart at speed, giving a similar impression of flying.

The weak point in my theory is the distance between the scene of these

incidents and the Orange River. Pythons like water, and they are not found deep in true deserts. However, this python (if python it was) may have found its way up a tributary of the Orange River in a wet season, and lingered in the hills to scare the wits out of those who saw it.

Reports of a flying monster have come from several parts of tropical Africa in recent years. Ivan Sanderson, a qualified naturalist, described an encounter with a creature like a pterodactyl in the Cameroons. Colonel Pitman, whose views on the giraffe I have quoted, recorded the rumours of a pterodactyl which reached him in Northern Rhodesia. He wondered how the primitive African could have described with such accuracy an

animal which has been extinct for so long.

Dr. M. D. W. Jeffreys of the Witwatersrand University, a scientist with long experience in tropical Africa, made a study of these native stories of animals which are not to be found in museums. An official in Northern Rhodesia showed the natives a picture of a pterodactyl, and they appeared to recognize it and give it a name. Dr. Jeffreys suggested that this might be due to "race memory", a vision inherited from the far off days when their ancestors hid from the terror.

Pterodactyls varied in size from little flying lizards like sparrows to fearsome creatures with a wingspan of twenty five feet. My friend Reay Smithers, director of the National Museum in Bulawayo, declares that modern reports of small pterodactyls are due to

confusion with the whale-headed stork. This bird has a prehistoric appearance and lives in the remote swamps from which rumours of strange creatures drift out to the world.

Carl Hagenbeck, the enterprising German animal dealer, once sent an expedition to Lake Bangweolo in Northern Rhodesia to search for a monster known to the natives as the *chipekwe*. He had received two separate reports of the *chipekwe*, which was described as "half dragon, half elephant."

One report came from an English hunter whose word Hagenbeck had no reason to doubt. The other was written by one of Hagenbeck's own collectors, Joseph Menges, a man who had done good work for him over a period of years. Menges had, in fact, discovered a new race of wild ass in Somaliland

and had sent a living specimen to Europe.

Hagenbeck was impressed by a detail in the Menges report. It seems that Bushmen in the area had included a *chipekwe* in their cave paintings. All the natives were firm in their belief. Hagenbeck selected for this difficult mission the veteran animal collector Hans Schomburgk, the man who went to Liberia in search of the legendary pygmy hippos and brought them back alive.

That must have been a difficult assignment, but the capture of a live dragon proved to be impossible. It was early this century that Schomburgk set out. He was attacked by natives during his journey, but he reached Lake Bangweolo at last. There the natives confirmed the story of the *chipekwe* and declared that it had eaten all the

hippos in the lake. Schomburgk would have hunted the monster, but it was the unhealthiest time of the year in one of the deadly corners of Africa. He and his assistants went down with malaria. The search was abandoned.

The trader and hunter J. E. Hughes, who knew Bangweolo for eighteen years, followed up the *chipekwe* rumours and offered a valuable bale of cloth as a reward to any native who could produce evidence – bone, hide or spoor. At last he met a native who claimed that his grandfather had taken part in a *chipekwe* hunt in the Luapula River. This memorable hunt had become a tribal tradition. It lasted all day, and all the finest hunters were fully occupied, hurling their harpoons at the *chipekwe*, trying to find a vital spot. The native said the *chipekwe* had

a smooth, dark body and a single white horn like a rhinoceros.

Hughes accepted the native stories of the *chipekwe*, for he knew the lake people well and could distinguish between truth and fiction. But he thought the monster had become extinct within living memory. If there had been a *chipekwe* in the lake during his long career there he would have heard of it.

CHAPTER 19

Africa's Dogs And Cats

MY FRIEND the French doctor, the man who revealed some of Africa's medical secrets to me, was also responsible for showing me one of the strange dogs of this world. I had passed it by as a mongrel of the Belgian Congo village where our river steamer was loading wood fuel. "*Regardez le basenji*", insisted the doctor. "There indeed you have a mystery – a relation of the Eskimo dog in the Congo forest."

I observed a coffee-coloured dog the size of a terrier, wearing a most amusing look of perplexity. Above the network of wrinkles on the forehead were large, foxy ears. The muzzle was sharp, the eyes hazel, the small tail was tightly curled.

"One of the oldest breeds on earth," remarked the doctor. "Old in Africa – but new in Europe. You would have a hard job to discover one in the whole of Britain or France."

That was more than thirty years ago, and even now the basenji – the "barkless" basenji – is rare outside tropical Africa. I last saw one when I was hunting in Angola, near the Okavango River, just before World War II. One of the Kuangari trackers, leading me in search of reedbuck, had a beautiful chestnut and white basenji with him. I had not expected to see the species so far south, for I had never come across one in Southern Africa before.

In the deep forests of the Congo and Angola, tribesmen use the basenji for detecting game, driving small buck into nets or chasing them from cover

into open country. Basenjis will also tackle the fierce, long-toothed twenty-pound reed rats which the natives eat. A basenji will scent its quarry at eighty yards. Above all, the owner can rely on the dog remaining silent. Indeed, the basenji often carries a little wooden bell or rattle when following game in the bush so that it can be located by the hunters.

Basenjis have never become so common in savage Africa as to be worthless. A native hunter in the Belgian Congo will give a dozen good spears for a well-trained basenji. Some wives cost less than that.

Basenji means "wild thing". It is sometimes known as the Belgian Congo Dog or Congo Bush Dog. Natives call it *M'bwa m'kubwa* *M'bwa mamwitu* ("jumping up and

down"), from its habit of leaping in an effort to see over the elephant grass.

Of course the basenji is not entirely voiceless. No one knows why any tame dogs started barking, for all dogs in the wild state are barkless. They may whine or howl like a jackal, or growl like a wolf; but the bark is a sign of contact with mankind. Basenjis have been known to bark. A basenji worth a couple of hundred pounds became almost valueless when it uttered a sensational but ill-timed bark at a London show some years ago. That dog was not allowed to breed. However, the basenji is not disqualified if it gives out its typical plaintive yodel or musical "grooo".

I find the barkless basenji fascinating not so much because of its voice, but on account of the mystery which the French doctor mentioned to me. "A

relation of the Eskimo dog in the Congo forest,” he said. Was it possible? I made inquiries in many quarters, and confirmed the statement.

Basenji belong to the Spitz or Pomeranian family, regarded as an Arctic breed. Perhaps you know that the four earliest breeds were probably the pariah, the Spitz, the greyhound and the mastiff.⁷ One cannot be absolutely confident about the origin of the dog, for the experts are at loggerheads

⁷ Dr. M. D. W. Jeffreys, of Witwatersrand University, a tireless investigator of African origins, holds the opinion that some men round the Mediterranean basin tamed a dog whence all breeds of dog arose. He wrote to me as follows: “The map pattern on the teeth of all dogs is the same: the map patterns on the teeth of wolves, jackals, fox and coyote are quite different, and each pattern is distinct for its species.”

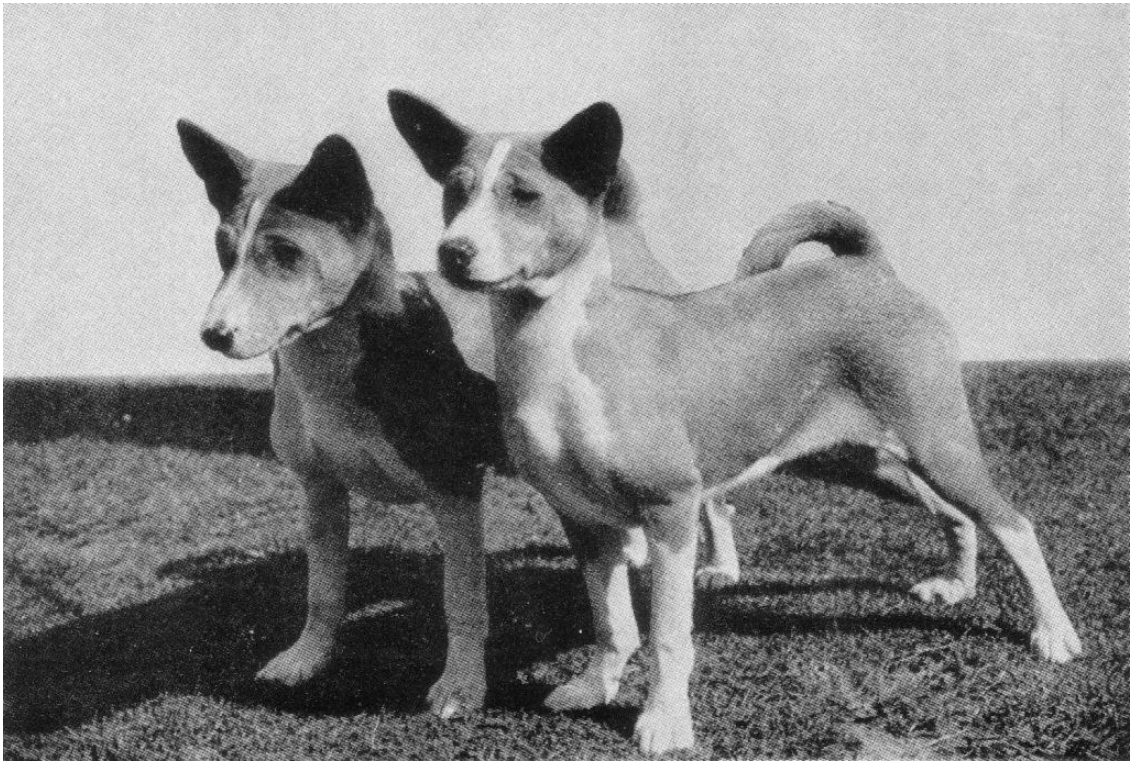
and the story goes back a very long way. Some authorities say that the people of Stone Age Egypt domesticated a jackal and produced the Spitz. Others declare that all dogs are descended from the northern wolf. Brian Vesey-Fitzgerald, a leading English authority, suggested that the progenitor was a wild dog. African natives will often tell you that their hunting dogs are derived from foxes, but there is no supporting evidence. Dogs breed easily with wolves and jackals. A cross between dog and fox has yet to be identified with certainty. Similarly the hyena is in no way related to the dog.

Whatever may have happened many thousands of years ago, whatever interbreeding may have occurred, it does seem that the Spitz inherited certain jackal characteristics. When it whines

or yelps, the similarity is remarkable. Anatomists claim to have discovered many points of resemblance between jackal and Spitz skeletons.” I feel that detailed theories of far distant events are excessively bold, and I would not care to commit myself. It is clear, however, that dogs of the Spitz type were carried by navigators from Egypt during the Stone Age and presented to the barbarians of Europe. My authority is Obermaier, the German archaeologist who excavated so many caves, sifted the kitchen middens and copied the paintings. Obermaier found evidence in Europe of an Egyptian jackal-like dog which was the prototype of the Spitz (also known as the Peat-Pomeranian), and from which the terrier was derived. Other members of the family are the Eskimo husky dog, the light-coloured Samoyed from

Siberia, the Scandinavian elk dog, the little Schipperke of the Dutch barges and – of all creatures – the Chowchow with its black or red fur and unique blue tongue. Examine them closely and you will see that every one of them has the unmistakable tightly curled tail.

Further evidence in favour of the Egyptian origin of the Spitz and his descendant the basenji has been found in the tombs. Egyptian artists painted dogs very like the Spitz six thousand years ago. Pictures of basenjis, wearing jewelled collars and led by dwarfs, were found in Tutankhamen’s tomb. So these poodle-like dogs were probably the earliest hunting dogs of Ancient Egypt, tamed long before the greyhounds and other breeds. A basenji of the Fifth Dynasty was found embalmed and perfumed and wrapped



Pictures of basenjis, wearing jewelled collars and led by dwarfs, were found in Tutankhamen's tomb.

in fine linen; evidently a dog of the Egyptian royal household.

It is possible, of course, that the first basenjis were tamed far down the Nile and brought to the Pharaohs as gifts. When the basenji died out in Egypt it survived and flourished in the lands of the equator. It is now really at home only in the great equatorial forests. There it is valued as a friend (and also eaten as a delicacy) by many natives, including the pygmies.

Europe only became aware of the basenji towards the end of last century, when a British explorer brought a pair of them to England. They were exhibited at Cruft's in 1895, but they died of distemper. Another pair brought from Khartoum by Lady Helen Nutting several decades later also died.

Mrs Olivia Burns secured the famous Bokoto and two bitches in the Belgian Congo, and when these were shown at Cruft's in 1937 they aroused so much interest that special police had to move the crowds away from them. Dog-lovers were enchanted when the basenjis washed their paws like cats or indulged in shadow-boxing like kittens. When the basenjis wished to play they brought their front paws down over their noses in a charming gesture. Basenjis are indeed among the most satisfying dogs; good companions, clean and odourless, obedient, gentle and fond of children.

African basenjis have short, smooth, silky coats, and those with reddish hair shine like burnished copper under the sun. They become acclimatized in Britain and America (like their

ancestors in the Arctic) and soon grow winter coats.

Dogs have changed enormously since the small carnivorous mammal known as Miacis, the ancestor or the whole canine tribe, appeared forty million years ago. It is hard to believe, for example, that the basenji and the toy Pomeranian are close relatives. But the differences in dogs are like the contrasts in pigeons. Selective breeding has created such dramatic transformations that a dog may bear no resemblance to its forebears of half a century ago. Yet in spite of the changes in other dogs, the basenji remains unchanged.

It lived for centuries hidden in the Congo forests, and flourished when the glories of Egypt faded. And when it was rediscovered within living memory it was still the dog of the Pharaohs.

I am grateful to the observant French doctor who knew Africa so well, Africa and its creatures, and did not allow me to miss the basenji in its forest home.

Cats, according to most authorities, were also first tamed in Egypt, though they joined the Egyptian household long after the dog. This is another of those guesses which are made in the absence of facts. The ancestor of the domestic cat, on the other hand, can be identified without any trouble at all.

Right down Africa from the Nile delta to the forests of Table Mountain there prowls a grey wild cat, *Felis ocreata*. One species hunts all through Africa, from Suez to the Cape; a solitary creature preying not only on small rodents and snakes but the largest gamebirds, lambs and young buck. This strong wild cat was the ancestor of

the first domestic cats which were taken to Europe.

It is a little larger than the tame cat, with similar markings and black toe-pads. This bold creature is seldom observed by city householders, but it flourishes in the suburbs of Cape Town almost as it does in remote places. Sir Thomas Maclear lost thirty fowls when wild cats raided the Royal Observatory last century. These cats carry off poultry at Camps Bay and Parow to this day. They mate with female domestic cats, disposing easily of any pet tom which is foolish enough to give battle. You cannot tell the difference between the kittens of the African wild cat and domestic kittens.

About five thousand years ago the Egyptians tamed and protected this wild cat to guard their grain stores against rats and mice. Or so the story

runs. It is possible that the cat was not captured by man, but that the cat decided to become man's pet. This pre-historic event, man adopting cat or cat purring its cautious way into the warmth of a well-stocked, meaty home, may have occurred anywhere in Africa, for the wild cat is found throughout the continent.

When the first white explorers and the early Dutch settlers landed in South Africa they recorded the presence of dogs, but did not mention cats. That does not prove that the native races had never tamed the wild cat.

Nevertheless, the first unassailable evidence of tame cats was found in Egypt. I would like to know how it came about. Some zoologists describe the European wild cat as the most ferocious and untamable of all animals. Konrad Lorenz, the German authority

on animal behaviour, however, has stated that no great effort is needed to turn the African wild cat into a domestic animal. He says it is a born domestic animal, though in a sense it has never become domesticated at all. Dogs do not often return to the wild, but almost every cat owner has seen a pet break away from civilization to go hunting.

No sooner had the Egyptians tamed the cat than they began worshipping this aloof creature which suggested divinity. They painted cats on temple walls, built a special cat cemetery at Bubastis, and made exquisite bronze models of cats. Tens of thousands of cats were mummified and placed in huge tombs. Peasants robbed the tombs in fairly recent times and used the ancient cats as fertilizer.

Early domestic cats of the Egyptians wore jewels in their ears. They went out hunting with their masters, acting as retrievers when game birds were knocked down with sticks along the Nile. But centuries passed before the domestic cat became common enough to export to other lands. Indeed, it was not until the first century A.D., that the cat reached Europe.

Egypt's ancient cats often aroused controversy among naturalists, for as recently as 1951 the British Museum was able to display only one skull of a mummified cat. Then an unopened box of scientific treasure was discovered in the basement. It contained nearly two hundred mummified cats, collected by Professor Flinders Petrie in 1907 and forgotten.

Mr. T. C. S. Morrison-Scott, who measured the skulls and described the

find, confirmed the theory that the common domestic cat, *Felis catus*, was descended from the African wild cat. Tomb paintings of 2,500 years ago, he said, revealed tame cats. Two paintings from Thebes depicted cats sitting on chairs. One wore a collar and was gnawing a bone, signs of complete domestication.

Cat breeds do not show the differences in size, shape and colour revealed by the large dog tribe. This is due to the stability and specialization of the cat's character. Ears, tails, patterns and colours have altered, but in many ways the cat has passed unchanged through the centuries.

I believe the nearest approach to the sacred domestic cat of Ancient Egypt to be found in the world today is the Abyssinian cat. This orange-eyed creature was first taken to England

after Napier's expedition in 1868, and it has become one of the recognized breeds. Markings are similar to those of the wild cat, but the Abyssinian cat has russet brown fur which feels like a rabbit's fur. The coat is "ticked", each hair being tipped with brown or black.

Abyssinian cats become unusually fond of their owners, though shy with strangers. They are intelligent and refuse to be ignored. No doubt the wild cat strain has remained in a much more pure form in this cat as a result of isolation. I have heard of another interesting cat on the East African coast, a domestic cat with short stiff hair instead of the normal soft fur. Little seems to be known of this cat, but I still hope to meet it one day.

Africa's only tailless cat is the extremely wild, elongated Pinta (*Cryptoprocta ferox*) of Madaga-

scar. This beast of prey with a yellow coat appears to be a descendant of some early form which was cut off there when Madagascar became an island. Other tailless cats are found in the East, especially in Malaya. It is possible that the Manx-Madagascar-Malay cats are all distantly related.

Watch your cat as it crouches with lowered tail over its food, like a wild creature hiding from its enemies. Observe the way it turns and tramples down the hearthrug; a habit that comes from the wild cat that makes itself comfortable in the grass. I think this fastidious animal joined us of its own accord, just as it leaves us when it hears the voice of the wild. The cat has its mysteries, but its ancestors are not mysterious. They are still with us.

CHAPTER 20

ON THE TRACK OF A SNAIL

*'Tis best with roasted shrimps and
Afric snails
To rouse your drinker when his
vigour fails.*

Horace

AFRICAN SNAILS have been relished by epicures for centuries, so that I should not have been surprised when I found a plate of snails put before me in an Italian restaurant on the shores of Table Bay. Those snails baffled me, and led me to a mystery.

It started when the Italian proprietor opened the huge bill of fare. I glanced casually at the veal dishes and spaghetti and gnocchis, and asked a question which you may find useful one day. "What are you having?"

"You would not eat what I am having," replied the proprietor with a challenging smile.

"Certainly I would eat it," I declared, scenting the unusual, the exotic dish which appeals enormously to me. And so I received my snails, which tasted very like the *luscious escargots* I had previously enjoyed in Paris and also (at a much higher price) in the Belgian Congo, snails flown from Brussels.

However, these Cape Town snails were not the *Helix pomatia* of the Continental restaurants. They were brown garden snails, *Helix aspersa*, a snail which belongs to Europe and which is eaten in Europe. It is a good wholesome snail, though it does not rank so high among connoisseurs as the fat Burgundy snail.

I ate my unexpected snails, cooked just as I like them; boiled gently for several hours, then stuffed with herbs and garlic and butter and baked in a hot oven. My friends were inclined to shudder at this feast. I finished the snails reluctantly, mopped up the sauce with a roll, and savoured the last of the white wine. Then someone asked me how these European snails reached the southern tip of Africa. After all, it is a long journey for a creature that covers about one tenth of a mile an hour. An impossible overland journey, in fact.

All the proprietor could tell me was that they had come out of a suburban garden. They appeared in great numbers after rain, and householders were glad to be rid of them. So they came to him free of charge, though it was necessary to feed them on lettuce

or vine leaves for two weeks and fatten them on bread soaked in water. Then he placed the snails in a bath of vinegar, salt and water to eliminate the slime. They were ready for boiling after that treatment.

Next day I followed the track of *Helix aspersa* through text books and museum reports. It led me back to the Cape Town of more than a century ago, to 1854, when Edgar Layard the museum curator of those days was living in the Gardens. His home had its own vineyard, and one day he noticed a cluster of foreign snails on the wall.

Layard knew that these snails, which he identified at once as *Helix aspersa*, could not have crawled down Africa from Cairo or Algiers to the Cape. He was an authority on birds; but he also collected snails for the museum and his neighbours were aware of it. Thus,

when a plague of snails descended on the hedges and vegetable gardens of Cape Town, the innocent Layard was blamed for it. Everyone thought he had introduced these raiders. Layard repudiated the accusation and set about tracing the culprit.

It was a neat piece of detective work. Layard looked up the harbour records, and found that a French man-o'-war had visited Table Bay not long before the snail invasion. Then he went to the French Consul, a Monsieur Dastre and inquired casually: "I suppose you miss your snails, living here at the Cape?"

"But indeed not," Dastre assured him. "Only the other day I received from a French man-o'-war a little barrel of live *escargots*, and now I am breeding them in my garden."

Ever since that time *Helix aspersa* has flourished in the gardens of the Cape, an unwelcome and destructive immigrant, valued only by those (like myself) who have a weakness for snails on the menu.

Layard travelled the world as a British consul, and found *Helix aspersa* in many far places. Nearly always a French ship had brought them. St. Helena received its snails while Napoleon was there. Tristan da Cunha might have remained free but for the importation of some potted plants which included snails in the soil. Port Elizabeth was invaded by *Helix aspersa* about a quarter of a century after Cape Town had recorded the first arrivals. No doubt the snails had reached Port Elizabeth by ship. Kimberley remained free from this snail until World War I. Robben Island

was an early host to these uninvited guests who cross the oceans so easily.

Another edible snail which came to the Cape by sea is *Helix Pisana*, the grey snail. Mr. W. G. Fairbridge, the attorney, identified the first specimen in 1881 on that grim mound of sand known as Gallows Hill near the present Cape Town traffic depot. This vigorous alien wiped out an indigenous snail completely, and crawled inland to many unsuspecting places, where it ravages the food plants to this day.

So the small flat *Helix pisana* is now the most common terrestrial snail of the Cape. It may be seen by the million, especially in dune country. I can see no hope of reducing their numbers until South Africans follow the French example and become snail-eaters. Once upon a time in France the demand for snails became so great that *Helix*

pomatia became almost extinct. A "close season" was discussed, but the situation was saved by enterprising and public-spirited men who established "snail gardens" for breeding purposes. South Africa has had too many snails and there is never a shortage. Simonstown was invaded by snails about a century ago, and the inhabitants found a neat way of disposing of them. The French cruiser *Joinville* was lying in the bay. Thousands of snails were collected and sent on board every day.

I think the only way out of the snail problem is to eat them. After all, the French polish off more than fifty million snails a year and love every mouthful. The late Dr. Louis Leipoldt, a true South African epicure, recommended snails not only for their appetising flavour but as a nourishing diet and for their medicinal value.

They are easily digestible. Snail soup was the ancient remedy for tuberculosis. Asthmatics have benefited from a snail diet. Some doctors of old also prescribed snails for coughs and stomach-ache, dysentery and ague, corns and scorbutic affections.

Snails belong to the same family as the slugs, whelks, conches, periwinkles and abalones (or perlemoen, as we say in South Africa). Cowries, once used as money, are also members of the family.

Remember that snails are able to feed with impunity on dangerous herbs. If you gather your snails in open country there is a risk of poisoning unless you follow the rules carefully and diet the snails before serving them.

Africa has imported snails to its cost, as I have said, but it has also exported

a giant among snails to spread consternation wherever it has landed. This is *Achatina fulica*, second largest of the ten thousand species of snail on earth, a monster with a body nine inches long, carrying a five-inch shell coloured green or purple, pink or brown, and sometimes snow white. The giant African snail can eat a head of lettuce at a sitting. Natives use the shells as spoons, cups, rattles and ornaments, and they grow plump on the rich meat.

Once again we observe a world-wide menace which started out on its travels as an item of food. It is at home in Natal and natives eat it in the East African territories as far north as Somaliland. For that reason it has never become a pest in Africa. Early last century it reached the Indian Ocean islands by ship, and it is on

record that the governor of the French island of Reunion imported this species from Madagascar as medicine for his mistress. She had a chest complaint and demanded the great remedy of the day, snail soup.

If the snails had stopped in those islands (where snails are appreciated) all would have been well. But they went on, always as a result of man's folly. Benson, a snail expert and a man who should have known better, took *Achatina fulica* to India and released it there. It became a curse, but it spread unchecked all over the East, eating up the rubber plants and gardens of Malaya.

Wherever they crawled or landed in favourable territory these great snails bred in millions. Chinese aided the spread because they were useful for fattening ducks. Japanese army

commanders gave the snails to their troops as rations, but the soldiers never ate them fast enough to keep the numbers in check. *Achatina fulica* crossed the Pacific to Hawaii and California, where worried American scientists found them laying their hundreds and thousands of yellow eggs the size of dried peas.

So the wheel swung full circle. American scientists went to East Africa to find out why *Achatina fulica* had never become a menace there. Besides the snail eaters, they observed civet cats, land crabs, insects, lizards, birds, a beetle and another carnivorous snail called *Goncaxis*, all preying on the giant snail.

What will happen if one of these enemies of *Achatina fulica* is taken to the devastated areas and released? It may concentrate on its old diet, or it

may select an easier victim. No longer do naturalists casually release foreign fauna in distant lands. They know at last that there is such a thing as the balance of nature, and they are terrified of disturbing it. Meanwhile the giant African snail goes on consuming food more luscious than any it tasted in East Africa.

Achatina fulica has a high protein value, and an amino acid content equal to a hen's egg. When dehydrated and reduced to a powder, it is used to enrich livestock food. The unwelcome *Achatina fulica* may yet become an asset. Among the secrets of the snail is its marvellous vitality. You can keep them in captivity for years, and they flourish. It is more remarkable to find them surviving for very long spells without food and water. For example, the British Museum exhibited an

Egyptian snail on a tablet under the impression that it was dead. Six years later it showed signs of life by coming out of its shell.

Some people watch snails as others watch birds, finding it a restful pastime. Not often has a poet been inspired by a snail, though Flatman's ode cannot be ignored:

*Mark how the snail with grave
majestic pace
Paints earth's green waistcoat with
a silver lace.*

But for me the beauty of the snail is seen at its best when it appears as *escargot* on the menu. I saw empty snail shells for sale in a Cape Town store not long ago. Some people make a mock snail dish of sweetbread and savoury butter, and present it in the shells. I will not turn up my nose at

that little entree, but the genuine escargots are best. Monsieur Dastre, that French Consul of long ago, would have agreed with me.

CHAPTER 21

LOST CONTINENT

AFRICA WAS not always shaped like a question mark. Once it formed part of the lost continent known as Gondwanaland, a theory which has a solid body of support among modern scientists. Geographers, zoologists and geologists are not yet unanimous on this point, but the array of believers is formidable. Dr. A. L. du Toit, the South African geologist, went so far as to declare: "The actuality of this former continent appears unquestionable." Gondwanaland, according to the scientific majority, was a vast southern continent millions of years ago when there were two other main land masses: the North America of today and the present Asia. Gondwanaland covered most of Africa, Madagascar

and southern India. It threw out land bridges to Australia and South America, or included those continents. Many dramatic changes occurred in Gondwanaland, with gigantic floodings and the rising and falling of the land. The sea cut off the northern coasts of Gondwanaland from the other continents. Only after the Jurassic (the age of reptiles) did our world assume its present shape.

The theory of Gondwanaland was put forward when zoologists noticed similarities between the flora and fauna of countries now separated by oceans. You may account for the dispersal of some forms of life by drifting logs or even floating islands of jungle growth such as I have seen off the mouths of the Congo and Amazon. Some birds cross the seas on their own wings; seeds are carried

by currents; insects and small mammals have survived driftwood voyages of hundreds of miles. But when you have studied all these possibilities, there remains a series of relationships which cannot be explained by such chance adventures.

“Special creation” was the old belief. Each continent appeared, complete with all its living things. Modern science does not accept the idea of two similar forms of plant or animal life arising independently and separated by half the globe. It prefers one or other form of the evolution theory, with all its flaws and exciting possibilities. I shall have something to say later about mankind’s place in the theory put forward by Darwin and others. Here I am trying to deal with our globe before the human race appeared; the animals

which came and went, and some animals that remained.

It is reasonable to expect to find each animal in the land mass where its ancestors lived, unless you can show how it migrated elsewhere. Thus a zoologist who discovers a kangaroo in South Africa has a problem which takes him beyond the frontiers of his own science and lands him among the geologists.

Only in 1932 was the first kangaroo found in South Africa. This was a miniature marsupial, about the size of a rat, found in a diamond terrace at the Kleinzee diggings in Namaqualand. This fossil fragment made a number of scientists far happier than any diamond they might have unearthed. The bones were sent round the world, from one expert to another. All agreed that the teeth, with coneshaped grinding

surfaces, were typically marsupial. Yet there was no previous record of any marsupial in Africa, in historic or prehistoric times.

South America has a rare marsupial, something between a shrew and an opossum, which is closely related to the extinct South African form. Australia has its wealth of pouched mammals, which were forced by the glacial epoch to migrate from south-east Asia along the former land bridge to Australia. There they survived because the land connection was broken off before any of the higher mammals, such as the dangerous flesh eaters, could follow and prey upon them.

So the presence of kangaroos in South America, South Africa and Australia supports the Gondwanaland theory. The cycads, which I have mentioned elsewhere, those "living fossil" plants,

provide another link in the chain of evidence; for they are found in South America, South Africa and Australia.

Then there is *Peripatus*, found on Table Mountain more than a century ago, a creature that resembles a worm but which is more of an insect. *Peripatus* is a haphazard, aimless rover which can only live in forests. Zoologists have studied it carefully because of its "missing link" character, and also because of its strange distribution. It survives in the damp forests of South America, Africa and Australia. *Peripatus* is regarded as the outstanding example of affinity between the creatures of South America and Africa. The succession of forms which it takes is exactly what the scientist would expect if South America, Africa and parts of the East were once joined.

As a contrast within the same theme, observe the great flightless birds; the rhea of South America, ostrich of South Africa, the extinct, wingless *Aepyornis* of Madagascar, the emu of Australia. They are far apart now, but once they must have shared the same, land. In no other way can one explain the similarities between these birds which have either never flown or have lost the power of flight. If they are of common stock they must have grown up in the same theatre of evolution.

Penguins also come into the picture. Cape penguins have their nearest relatives in the Falkland Islands. Fossil penguins have been found in the south, but there are no penguins, even fossil penguins, in the northern hemisphere. So the penguins originated in the south, and they were among the birds of Gondwanaland.

Among the fresh water fish you find other family likenesses. Three South American species, including that great fighter of the rivers, the tiger fish, also occur in Africa. The cat-fish of South America is closely related to certain African and Indian river fish. And there is a large group of fresh water species known as *Ciclalidae*, including barbels, members of which are found in South America, the great lakes and rivers of Africa, and also in India and Ceylon.

In Madagascar there are perches which are never found in the sea, and a variety of fresh-water crayfish, frogs, tortoises and snakes which would soon have perished if they had entered salt water or embarked on rafts in the effort to cross from Africa to Madagascar. They, too, must once have been inhabitants of Gondwanaland.

Gondwanaland may explain that creature of obscure origin, that champion tunneller of the veld, the *erdvark* or ant-eater. This pig-shaped freak is not rare, but is seldom captured and few museums can show you a specimen. Anteaters are called edentates (toothless), but they have rootless molars which are always growing. Ant-eater and pangolin are the only edentates of the Old World.

The ant-eater is one of the ancient forms of mammal which has survived in Africa with little apparent change in structural character. Elephants, rhinos and hippos are others in this class. But what were the ant-eater's ancestors like? The dassie, which is a distant relative of both elephant and rhino, must once have been a far larger creature. Some naturalists believe that all evidence of the parent stocks of the

ant-eaters and the dassies perished when Gondwanaland sank beneath the waves. The lung-fishes in Central African rivers are regarded as other members of the fauna which Africa shared with Gondwanaland.

Gondwanaland, by the way, takes its name from the Gondwana geological system in India. Glacial beds form an essential feature, and these were found in the Gondwana land countries; for example, the Karoo system in South Africa.

Opponents of Gondwanaland point out that the animals of South America and Africa are remarkably different. Only in a few groups are there similarities which can be explained by other means. If the continents were once connected, why are there not many more similarities? These resemblances are found among animals of unknown

ancestry, and might be remnants of widespread species which had become extinct in the northern hemisphere. It should be noted that there are still a few evolutionists who think that all the main groups of animals originated in the northern hemisphere.

Some authorities believe firmly in the permanence of the great ocean basins. They are unwilling even to admit that Madagascar was ever part of Africa, and stick to the raft theory to account for the Madagascar fauna.

A. R. Wallace, the botanist and zoologist who collaborated with Darwin, devoted himself for years to research into the problems of the distribution of plants and animals over the globe. He noted that many mammals swam well over short distances. Deer were bold swimmers; squirrels, rats and lemmings were not afraid of water;

wild pigs could reach land twenty miles away. And once a male and female landed, they multiplied rapidly.

Wallace found a snake on an island two hundred miles from the nearest mainland, and satisfied himself that it had drifted there on a tree-trunk. He found lizards, too, on many islands and thought it possible that the eggs had drifted over the ocean. Bats crossed the water on their own wings. The eggs of fresh-water fish might be carried by birds.

So there was no room for “land bridges” in Wallace’s mind, and he challenged many theories involving transformations of land and sea, though he had to make an exception of Madagascar. He declared that it had become separated at a remote epoch, when its animal forms were very unlike the present animals. “Such

islands preserve to us the record of a bygone world, when many of the higher types had not come into existence,” Wallace wrote.

Darwin was scathing about land bridge theories. “Biogeographers are prone to construct land bridges in every convenient direction and sink imaginary continents in a quite reckless manner,” he declared. Hooker, one of the famous botanists of last century, commented: “Land bridges are the forlorn hope of the biological geographer.”

I believe those geologists who say that Gondwanaland rose and fell, leaving a link between Africa and India, which in turn sank beneath the waves. They call the link Lemuria, after the lemurs, those interesting little primates which dominate the mammal world of Madagascar. They are found all the

way from West Africa to the East Indies; creatures that resemble monkeys, but which belong to a different zoological group. Monkeys had not yet appeared in the early Tertiary period, but the older lemurs were there. The lemurs crossed to Madagascar. Then the route became impracticable, so that when the monkeys came on the scene they were unable to migrate. Such is the theory, and in fact there are no monkeys in Madagascar.

Wallace poured scorn on Lemuria. He thought there might once have been a chain of intervening islands between Africa and Madagascar, thus allowing small mammals to cross by his favourite method – tree trunks. Great depths exist between the islands of the Indian Ocean, as much as three thousand fathoms, so that Wallace found it impossible to believe in a

continuous land surface. All he would admit was the possibility of large islands having become submerged after acting as stepping-stones for the animals.

Yet this keen observer Wallace noted a number of peculiarities which should have led him irresistibly towards the Lemuria theory. Fourteen miles to the north of Mauritius are a few tiny islets of palms and flagstaffs, with mysteries to keep a zoologist wondering for years. Round Island has a snake of the boa family which is not found anywhere else in the world. It was not taken there by man. Mauritius has no snakes. The boas are so primitive that fossil boas of sixty million years ago are very much like the modern boas. And so one boa, which must have inhabited Lemuria, survives on an island one mile broad near Mauritius.

Its relatives are to be found in Madagascar, Australia and South America. Surely that ought to have meant something to Wallace?

Round Island also has a gecko which is not found anywhere else. There is a palm of a species confined to Round Island and the neighbouring Flat and Serpent islands. Here are more survivors of the lost continent of Lemuria. It is probable, of course, that the reptiles and unique palm of these islets were once found in Mauritius, and were exterminated. A bank, covered by one hundred fathoms of water, connects Mauritius with the islets.

Modern geologists are very much in favour of Gondwanaland and Lemuria, basing their opinions on evidence which was not available in Wallace's day. Until early this century, of course,

very little was known of the Indian Ocean. Only in 1905 was an expedition sent out from Britain to investigate these ancient land connections and the distribution of animals. The scientists were headed by Professor J. Stanley Gardiner, zoologist and anatomist, of Cambridge University. They had the use of H.M.S. *Sealark*, a survey ship in charge of Commander B. T. Somerville, who became a famous hydrographer.

“H.M.S. *Challenger* carried the greatest biological expedition ever sent out by any country,” Gardiner declared. “But they omitted one ocean, the Indian Ocean, and this has remained unknown. No area in the world, perhaps, is so little known as the ocean between India and Madagascar.”

Gardiner was right. And it was so lonely that in six months *Sealark*

sighted only one small brig at sea. *Sealark* sailed and steamed from island to island, pausing to lower miles of piano wire and chart the depths. In the end Gardiner was baffled. He, too, noted the tremendous depths and failed to trace any submerged bridge from island to island or between India and Africa. Yet evidence from other sources of a former connection was so strong that he retained his belief in the sunken continent. The chart showed him a mass of islands which suggested the ancient land connection; while others, coral isles and reefs, might have been built on foundations formed by the remains of Lemuria. Gardiner found it difficult to reconcile the distribution of life with *Sealark's* soundings, but he thought that some “great depression” must have taken place, possibly in the Tertiary period, when such great

mountain ranges as the Himalayas and the Alps were thrown up.

It was not until 1932 that another expedition set out to solve the riddle of Lemuria. Once again the search was directed from Cambridge University, and the specimens were examined there. Professor Gardiner acted as secretary, while Colonel R. B. Seyanour-Sewell took charge of the work in the research trawler *Mabahiss*.

On this occasion the scientists claimed that they had found definite evidence of the lost continent. After three voyages, the scientists of the *Mabahiss* drew a map of the world as they thought it existed ten million years ago. Their map showed land where the seas run today, and oceans in the place of our continents. They had located and marked a submarine mountain rising ten thousand feet from the ocean floor,

though its summit was still one thousand feet below the surface. Their echo-sounder had also revealed a deep gully which may have been the bed of the River Indus long ago.

Ten submarine ranges were charted, running north-east to south-west across the Gulf of Aden, between India and Arabia. The general shape of the area left the scientists in no doubt that the sea floor was once a large land area. It was not flat and smooth, as the old geographers imagined, but an area which, in its broad features, was as varied as any continent. Thus, if the Arabian Sea (a northern part of the Indian Ocean) could be elevated, it would prove to be a great lake surrounded by mountain ranges from Sacotra to Chagos and up through the Maldives and Laccadives, bounded on the north by the continent.

So the idea of the stability of oceans, held for so long, was shattered. Gondwanaland-Lemuria almost became a certainty. I suppose the only controversial point that remains is this – how did Gondwanaland vanish?

Professor Gardiner said: “One can only deduce that the whole vast tract of land, and part of the Indus, went down in a tremendous volcanic upheaval.”

A later school of thought was headed by Professor Alfred Wegener, who became director of the German oceanographical survey shortly after World War I. Wegener is mercilessly technical in his writings, but his theory is that the continents drifted apart.

If you compare the shoulder of Brazil with the West African coast, it fits in neatly. Minor curves also correspond. Wegener put forward a new view of the

earth's crust. He argued that the outermost rocky crust of the earth no longer envelopes the whole globe, but had shrunk into mountain folds. The Atlantic was a rift. If you test the theory you will see that mountain folds do correspond; for example, the Permian folds of the Cape mountains fit exactly the opposite ranges in South America, and both are of the same age and structure.

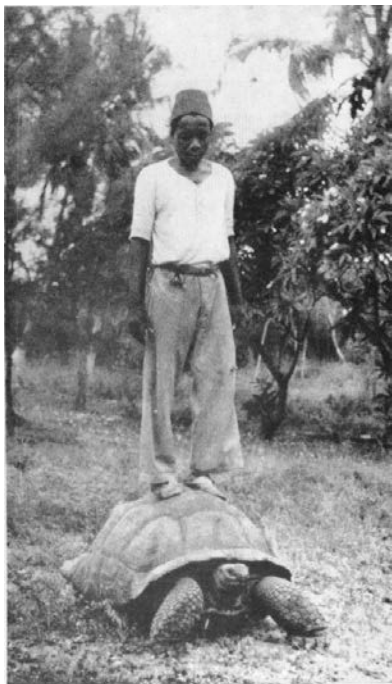
Wegener disputed the land bridge theory and urged direct connection. The continents, he declared, could not sink to the depths found in the great oceans. They simply drifted apart, and *they are still in motion now*. In many places the movement was too small to be measured in a reasonable time; but Wegener recorded a movement of fifteen metres a year in Greenland.

Wegener's theory explains the present-day distribution of plants and animals. It also does away with one great objection to the Gondwanaland theory; the mechanism by which the great land masses could have risen from the sea and how they foundered again.

Nevertheless, Wegener believed in Lemuria, and he spoke of the sea invading the present Indian Ocean site and swallowing up the land. It is a most technical and controversial subject, best left to geologists. But if you accept the idea of the lost continent of South Atlantis, Gondwanaland or Lemuria, you will not be unduly credulous. Most of the finest scientific brains in the world are on your side, while Darwin's sarcastic remarks about sunken continents now appear foolish indeed.

If you are still dubious about the "drowned continent" of Lemuria, please turn your attention to a survivor of the cataclysm, the giant tortoise. Darwin studied this creature in another part of the world, and based his theory of evolution to some extent on those observations. If only he had met the tortoises of Africa and the Indian Ocean islands he would have formed a very different impression, and there might have been no "Origin of Species".

In many ways the giant tortoise is a significant animal. Under his monstrous shell lies a secret of evolution, and it will be a scientific disaster if this vanishing race is allowed to become extinct. The part which the tortoise plays in the Lemuria mystery is a small affair compared with the place of the



In many ways the giant tortoise is a significant animal. Under his monstrous shell lies a secret of evolution and it will be a scientific disaster if this vanishing race is allowed to become extinct

tortoise in the vast scheme of life on this earth. I first met the giant tortoise when I was a schoolboy, little knowing that the time would come when I would be watching these old ones on lonely islands and other far places. But I was fascinated by the great tortoise at the age of ten. My school playground in Cape Town abutted on the South African Museum lawns; and every day at lunch-time four great Aldabra tortoises lumbered up to the fence and snapped at any sandwiches that were offered to them.

Africa, you may know, is a tortoise paradise. They are so plentiful in South Africa that small ones were shipped to Britain by the thousand and sold at a shilling each until, shortly before World War II, the export was prohibited. Large leopard tortoises, though not so common, are distributed

from the Cape to the Sudan. I remember a record leopard tortoise in the museum grounds that weighed fifty-seven pounds and measured twenty-eight inches over the curve of the back.

Aldabra tortoises make that one look like a midget. The island of Aldabra is one of those fragments of Lemuria to the north of Madagascar. It is the last natural home of the largest tortoises in the world. Lord Rothschild, who collected tortoises, owned an Aldabra specimen that weighed five hundred and sixty pounds and measured nearly seventy inches in length over the curve. This was surpassed by a specimen I saw in the British Museum which weighed eight hundred and seventy pounds!

Giant tortoises reach great ages. Apparently they were on earth before the dinosaurs and crocodiles, and today

they outlive the crocodiles. Boulenger of the London Zoo traced a tortoise that had belonged to the Bishops of Peterborough for more than two hundred years; and he thought a giant tortoise might live for three centuries. Rothschild, indeed, estimated the age of his Aldabra tortoise at three hundred years. Some authorities claim to be able to calculate the age by counting the growth-rings on the horny plates of the shell, just as the age of a tree may be found by counting the rings on a cross-section of the trunk. Boulenger used to point out to visitors a tortoise which was alive in the reign of King Charles II, and which had survived the Fire of London and the Great Plague.

I have seen the Aldabra tortoise which was exiled on St. Helena before Napoleon was sent there, and which is still full of vitality. Some naturalists

regard the St. Helena tortoise as the world's oldest inhabitant, for it was far from being a youngster when it arrived. I know there is a giant tortoise living in Tonga which was presented to the Queen of Tonga in 1777 by Captain Cook. And I have visited a giant tortoise in the grounds of a Mombasa hotel, a venerable old tortoise which was supposed to have been brought there by the Portuguese well before they were driven out of East Africa early in the eighteenth century. Such relics are indeed living links with history.

However, it is not only the age of the giant tortoise which makes it so remarkable. The numbers impressed the early navigators who called at the Indian Ocean islands. Rodriguez, east of Mauritius, was the scene of the discovery; and Leguat, the first settler,

who was there at the end of the seventeenth century, saw a swarm of three thousand tortoises. He said it was possible to walk a hundred paces on their backs without stepping on to the ground.

Tortoises were shipped away from Rodriguez as food. Each giant yielded eighty to three hundred pounds of luscious, wholesome flesh, and as this did not rank as meat it could be eaten by Roman Catholics on Fridays. So the ships loaded tortoises at many Indian Ocean islands until they were exterminated everywhere but in the almost impenetrable scrub of Aldabra. (The dodo of Mauritius went the same way, as food for greedy seamen.) Frenchmen loved the tortoise, and two centuries ago they kept four ships busy sailing between Rodriguez and Mauritius. Altogether they lifted and

consumed thirty thousand giant tortoises in eighteen months. One advantage was that the tortoises demanded neither food nor water, and remained alive for months without sustenance.

So the giants were wiped out, except on Aldabra, and early last century they were found elsewhere on the Indian Ocean islands only as pets, or on "tortoise farms" in the Seychelles. They breed tortoises in the Seychelles, marking a young one when a human girl baby is born, slaughtering the tortoise for the wedding feast when the girl is married. Madagascar is rich in smaller tortoises, and I saw a survival of the old trade when a French ship called at Cape Town between the wars to load mules. Under the awnings of that old steamer the decks swarmed

with tortoises, food for the crew of white, black, brown and yellow men.

Old log-books and the narratives of travellers make it clear that the giant tortoise was widely distributed over the Indian Ocean islands before man descended upon them. I was shown the swamp called Mare aux Songes in Mauritius which yielded not only dodo bones but the carapaces of extinct species of giant tortoise. They sent the shells to Dr. Albert Gunther, the German zoologist who classified reptiles for many years at the British Museum.

Gunther was puzzled (as were many zoologists after him) by the peculiar distribution of the giant tortoise. It was still living on Madagascar when the first men arrived, but had become extinct. On lonely and scattered islands such as Reunion, Mauritius and

Rodriguez, the Seychelles and Aldabra groups, they had survived much longer, and in almost incredible numbers. How did they get there?

Take the lonely Aldabra group as an example. This consists of four main islands of such unusual coral atoll formation that the geologists do not know what to make of it. (Possibly there is a mountain of volcanic or primitive rock on which the atoll rests.) Aldabra lies more than four hundred miles from the East African coast, nearly three hundred from Madagascar. Eggs of the giant tortoise were found under the soil of Amirante Island, which is even more isolated, nearly a thousand miles from the East African coast.

How did they reach these lonely oceanic islands? Wallace's rafts are no use to us in considering this problem.

They could not have been carried by man, because the geological evidence proves that the tortoises were there long, long before the first Arab dhows ventured into those waters. Tortoise bones have been found on Aldabra deeply imbedded in the soil.

The tortoises did not swim to the islands. Tortoises have been tested as swimmers. They drown within a few hours. Gunther ruled that out when he declared: "Absolutely helpless, these animals could not make active progress in the water and would perish long before a favourable current carried them to a distant shore. Dispersal by accidental means may be set aside in their case as utterly incomprehensible and inadequate."

One famous and well-qualified zoologist, faced with this problem, suggested in despair that all these giant

tortoises were derived from marine ancestors! This was obviously absurd, as his colleagues hastened to point out. If there is one animal more than another in this world which may be used to disprove the evolution theory, it is the tortoise. You can go back to the fossil tortoises of millions of years ago and find a creature almost identical with the tortoise of our own times. Gunther pointed out that the tortoise had scarcely changed since the Eocene. He thought it was in existence before the Tertiary; that is to say, before the older forms of life became extinct and their places were taken by the modern species of animals.

Professor Stanley Gardiner, who studied the Aldabra giants during the *Sealark* expedition, summed up the mystery in 1905 like this: "Aldabra and certain other Indian Ocean islands are

purely oceanic and had no previous land connections. The tortoises could not have been brought by man because we know of no nation that could have sailed the Indian Ocean early enough. Tortoises do not drift on logs. If the giant tortoises were derived from a small species distributed by logs, then they form a wonderful example of parallel evolution. And they must have drifted in extraordinary numbers to colonize so many islands. All means of escape from the problem are therefore withdrawn, and there are great objections to any explanation."

Mr. J. C. F. Fryer, another *Sealark* scientist, held that it was possible to account for the tortoises on the Seychelles because those islands represented the last of the great land bridge (Lemuria) remaining above the water. The tortoises reached the

Seychelles by land. But they could not have reached the coral islands in that way. "I must confess that we know nothing of the means by which so many of the islands of the Indian Ocean were occupied by giant land tortoises," declared Fryer.

More recent examination of Aldabra and the other ocean islands has shown that these specks on the chart are not typical coral islands. They have been there for millions of years. They were all of them once part of the African mainland. The giant tortoises were marooned when Lemuria sank. It must have been a slow submergence, or the lazy tortoises would never have reached the mountaintops in time to save their lives. However, that is now the picture of events accepted by modern scientists. The oceanic islands, with their plants and

tortoises, remain as unassailable evidence of the lost continent.

Even old Gunther realized that before the end of last century when he declared: "The great ancient southern continent Gondwanaland, *the existence of which we cannot entertain any doubt, must have been the birthplace of a variety of plants and animals, Possibly of gigantic land tortoises.* If this be so, then these tortoises would have to be regarded, not as accidental importations from some distant continent, but as members of the Gondwana fauna which survived on the island fragments of the old continent."

Naturally, the very size of the giant tortoises has caused much discussion, and zoologists found an easy (far too easy) and plausible explanation of it. It was put down to environment.

Many evolutionists rely heavily on environment for the creation of new species. All the way up the scale to man himself you hear this environment theory as a way of explaining the inexplicable.

Now you know one reason why I said the giant tortoise was a significant animal. Mr. W. P. Pycraft, a fine zoologist, lamented the reckless slaughter of the tortoises in these words: "It has deprived the world of some of its living wonders and of a source of information and inspiration as to the agencies at work in the fashioning of living bodies. They afford us astonishing facts touching on the distribution of land and water and 'lost continents' in the dim and distant past. They have much to show us in the way of evolution of new species."

Giant tortoises are of a number of species. I said that Darwin studied them in another part of the world, the distant Galapagos Islands on the equator five hundred miles to the west of the South American coast. Each of the six islands in the Galapagos group had its own species of giant tortoise. It seemed that ages of isolation had caused one original type to diverge and become six different species; in other words, that animal types were not rigid, but were capable of transforming themselves. The observation was faulty, as I shall prove later, but Darwin fell into the trap.

At the time Darwin wrote: "I never dreamed that islands, about fifty or sixty miles apart, and most of them in sight of each other, formed of precisely the same rocks, placed under a quite

similar climate, rising to a nearly equal height, would be differently tenanted; but we shall soon see that this is the case.”

Darwin deduced correctly that the Galapagos had once formed part of the South American mainland. He also declared that the animal “colonists” would be liable to modification, though the principle of inheritance would still betray their original birthplace. Darwin did not rely entirely on environment to account for the different species of giant tortoise and other animals found on neighbouring islands. He stated plainly that physical conditions were not the most important factor. “It cannot be disputed,” he wrote, “that the nature of the other species with which it has to compete is at least as important, and

generally a far more important element of success.”

One more quotation from Darwin is necessary. His visit to the Galapagos impressed him deeply and started the train of thought which led him to the evolution theory. He wrote in his 1837 diary: “In July opened first note-book on Transmutation of Species. Had been greatly struck from about the month of previous March on character of South American fossils, and species of Galapagos Archipelago. *These facts (especially latter), origin of all my views.*”

I will now show that Darwin based his views largely on a fallacy. Those giant tortoises, on the Galapagos and on the Indian Ocean islands, owe nothing, or next to nothing, to their isolated environment or to the other animal

species with which they have had to compete.

It has been repeated by one zoologist after another that the tortoises became giants because of their environment. Isolated for centuries, untouched by man and untroubled by competing animals, in complete freedom from all enemies, they grew heavier and heavier. They ate and multiplied and possessed the land in unbelievable numbers. Some species of giant tortoise have extremely thin shells. This fact is also put forward by the evolutionists to show the changes that occurred (in their opinion) in the utter security of the islands.

Such bold theories may have sounded fairly scientific in Darwin's day, but for many years there has been no excuse for repeating them. The truth is that giant tortoises are

not peculiar to lonely islands. Their remains have been found at both ends of the old "land bridge" of Lemuria, and the extinct mainland forms were even larger than the island giants. In the Sivalik hills of India there was a tortoise, *Testudo atlas*, with a skull seven inches long and a shell eight feet in length. Egypt has yielded *Testudo ammoya*, also larger than any giant tortoise of today. And if these fossils do not satisfy you, there is still living in the Sudan a species of greaved tortoise, *Testudo calcarata*, with a shell measuring three feet over the curve. That is a giant form, a brown giant that harmonises with its desert surroundings.

As for the thin shells, supposed to have been developed owing to the peace and quiet of the islands, that is

probably due to unsatisfactory diet. On some islands the tortoises find the bone-forming material they need, and maintain thick shells. On others the diet, and not the environment, produces thin shells.

Darwin, let me recall once more, was deeply impressed by the fact that each island in the Galapagos had its own species of tortoise. Many later observers have pondered over this problem, for while some of the differences are trivial, others are dramatic. Abingdon Island has *Testudo abingdoni*, a thin-shelled species, while on Duncan Island is *Testudo ephippium*, the great saddle-back tortoise with the front of the shell raised to form a saddle or hood over the head.

If only Darwin could have visited the Indian Ocean islands he would have

found a replica of the saddle-back tortoise on Aldabra, the *Testudo daudini*. And on Rodriguez he would have gazed in dismay, I imagine, on *Testudo vosmaeri* with its thin, delicate shell.

Another point to bear in mind is that the Indian Ocean island tortoises are not all giants. In the Seychelles, and on Diego Garcia, are little fellows that have failed completely to respond to the theoretical "growth urge" of isolation. These small tortoises also have their relatives on the African mainland and in Madagascar.

The great tortoise mystery is solved when you realize that millions of years ago the tortoises, large and small, were far more widely distributed than they are today. Thus you find some of the survivors on remote

islands, retaining the similarities which they had in the beginning. So the theory of evolution as applied to the giant tortoise falls to pieces. Those giants were always giants. Evolution and environment did not make them what they are. The fossils prove that the tortoise has remained unchanged for two hundred million years. It is so old that no ancestor can be discovered, though a fossil reptile known as *Eunotosaurus africanus*, found in the Cape Province of South Africa, may have been an earlier form.

The tortoise is so old that it lived in Lemuria and was among the survivors when the continent sank. How long can the giant tortoise survive now that man has settled on the peaks of the drowned continent?

Franco Prosperi, an Italian

zoologist who visited Aldabra a few years ago, reported: "They lay in hundreds, side by side, dark and enormous. They still exist in thousands, and we estimated a total of eighty thousand on all the isles of the atoll. Roots, grass and dry leaves keep them alive in an age to which they no longer belong."

Prosperi repeated the silly old tale about the tortoises flourishing and increasing in size because they were left undisturbed. With all the facts now available he ought to have known better than that. His report ended on a sombre note. Goats had been left to graze on Aldabra, and were eating the age-old fodder of the tortoises. It will be a disaster indeed if one of the most interesting survivals on earth is finally wiped

out by one of the least interesting
pests, the goat.

CHAPTER 22

CRADLE OF MANKIND

AFRICA, SAY many scientists, was the cradle of mankind. Darwin himself remarked: "It is probable that Africa was formerly inhabited by extinct apes closely allied to the gorilla and chimpanzee; and as these two species are now man's nearest allies, it is somewhat more probable that our early progenitors lived on the African continent than elsewhere."

Scientists who searched for extinct apes and primitive human fossils, however, made their first important finds in the East. Dubois, a Dutch surgeon, went to the Dutch East Indies determined to find a "missing link" there; and lo! he came upon a fossil skull-cap which he and certain scientists claimed as pre-human. Other later, well-informed scientists

have identified it as a giant gibbon. You must be prepared for violent differences of opinion and dramatic revelations in this quest for man's ancestors and birthplace.

China has provided some interesting fossil teeth, which were found in drug-stores. (They grind up old teeth in China and use them as medicine). On such meagre fragments the bolder scientists built up fanciful pictures of Peking Man and other imaginary characters from the remote past. Men forgot Darwin and did not look for clues in Africa, because Asia had supplied all the evidence.

Then, in 1925, a skull was sent from Taungs in Bechuanaland to Professor Dart, head of the anatomy department at Witwatersrand University. Dart claimed it as a baby chimpanzee with many human characteristics, some-

thing nearer to the ancestor of man than any other known form. Africa began to recover the place of honour Darwin had awarded it. There are still fierce defenders of the oriental fragments, but the African skulls are now too plentiful and too significant to be ignored. Darwin may have been right after all.

Proud anthropologists in North America came on the scene of controversy some time ago with a single, worn tooth. They measured and manipulated that ancient tooth until they were prepared to swear blind that it had been part of an ape. *Hesperopithecus*, they named it – the “dawn ape” of America. Now and again it is possible to prove that highly-qualified scientists may also be conceited asses, and that was one of those happy occasions. Someone

stepped forward with an identical tooth, and the skull of the pig which had grown the tooth. Scientists may be wrong.

Rivals in science are as jealous and bitter as politicians, and they jump for scraps of publicity like hungry dogs. Or as the late Dr. Robert Broom remarked mildly: “It is unfortunate that we frequently see a tendency in even some eminent scientists to doubt the honesty or at least the skill of other workers.” I want you to bear these facts in mind while you listen to the theories about the cradle of humanity. The more you study this problem, the more humble you should become in the face of the most interesting of all the earth’s riddles, the greatest mystery of all.

Because it is so interesting, many people have put forward theories. I welcome such theories provided they

are discussed meekly by seekers after truth. All too often the theorist is a loud and forceful individual seeking personal aggrandizement. How can the finest human brain be expected to discover the origin of our universe, the creation or derivation of living matter and the emergence of man? Yet there are many, many humans (possibly not the finest brains) who will give you a rough outline as casually as though they were lecturing on the recent history of Africa. Let us glance at this vast picture as the scientists have presented it so that we can see the African cradle theory in perspective.

Scientists do not care to say whether our universe had a beginning. Infinity is beyond them, and they skate round that unimaginable subject with a modesty which quickly disappears. Astronomers, who are not so pontifical

as some other scientists, freely admit that the origin of the solar system remains an unsolved mystery. Professor W. M. Smart of Glasgow University went so far as to declare: "To many of us, scientific and non-scientific alike, the belief in a Divine Creator is as necessary now as ever it was. To one astronomer at least 'The Heavens are telling the Glory of God and the Wonder of His Works'."

That is not a typical scientific attitude. Darwin was no atheist; but all the way down the line of modern science you will find a reluctance to accept Divine intervention. According to modern science (which may be wrong) our earth detached itself from the sun about three thousand million years ago. Continents and oceans were formed, and about fifteen hundred million years

ago the earth cooled sufficiently to allow life to appear.

How did life appear? Now the great rival packs of scientific dogs really begin to snarl. Some say the sunlight played on sheets of organic matter in the ocean and created life. It was a complex chemical reaction, and it resulted in the formation of an unknown sea creature. Recently an American biologist declared that man was not an animal but a plant which had evolved from seaweed. "Everything points to plants as being the beginning of life on earth," he said. "All life belongs to the plant kingdom." He may be right.

Other scientists, more daring, believe that "seeds" of life came flying through interstellar space and lodged on earth, where they evolved in many different forms. This idea has caused many a

fierce argument, for it is difficult to understand how the "seeds" survived the grim journey from an unknown planet.

The idea of the birth of protoplasm in the ocean is the current religion of the scientists. A living cell, they say, was produced. Pasteur, who was no mean chemist, denied it. He said spontaneous generation was unthinkable; that living matter could not be derived from dead matter. Scientists are still busy in their laboratories trying to create life in their test-tubes, but they have not yet succeeded in proving that Pasteur was wrong.

Well, the scientists go on to say that the living cells became animals without backbones. Then came the fish. Amphibians evolved, lung-fish which could live on land; and these pioneers crawled on shore and turned into

reptiles. The reptiles diverged, some becoming birds, others mammals. Some unknown mammal began assuming, a prehuman form, which resulted in man.

If you gasp in wonder at this miracle, greater in its own scientific way than any Biblical miracle, the scientists will hasten to explain that all this took a long time. Time is the god of the scientists. They may be right, but I wish they would not be so sure of themselves. I fail to see how time *alone* worked these miracles. It was all pure chance, according to the scientists. If the warring religions lead me to the obvious conclusion that most of them must be wrong, the atheistic scientists fail to an even greater degree to convince me of the truth of their theories. They may be right, but what a sensational tale they have to tell of the

transformation of fish into men and women with consciences and creative ability.

You might call it “the fish that learnt to play the violin”. Hans Andersen wrote nothing like that. However, it took a long, long time. And the scientists have not yet told us whether the male and female apes crossed the borderline at the same moment; or whether, for thousands of years, male or female apes consorted with male or female humans. I wish that I could have put that point to Darwin.

After this absurd digression of mine you may find it almost a relief to approach the main theme again – the theory that mankind evolved in Africa from apes. It is a disturbing theory, for no one can be proud of ape-like ancestors. When Darwin first published this brilliant and provocative theory a

century ago it was also regarded as an attack on religion. If man was an animal he could not be immortal. However, it has since been realized (and stated by religious authorities) that God may have achieved His purpose by means of evolution. Genesis is no longer taken literally; it is simply a record of ancient legends. As recently as 1951 the Pope issued an encyclical which permits Roman Catholics, if they wish, to believe in the animal origin of man.

So the scientists may be right. I must add, however, that although the majority of scientists accept evolution as a fact, not one of them has succeeded in proving it. After a century, it remains a theory. During that century various objects have come to light and have been measured and manipulated (like the pig's tooth) to conform with

Darwin's theory. Many fine scientists remain dubious. Darwin's theory of Nature selecting the fittest members of a species to form a new species went by the board long ago. Darwin was a great field naturalist: He collected facts that no scientist before him had noticed. But in working out theories from these facts, Darwin was often wrong.

Nevertheless, the theory of evolution (with modifications) has become a religion in itself with some scientists, and it is regarded almost as bad taste to demand proof. Professor D. M. S. Watson put that view (or so I thought) to a scientific gathering in Cape Town in 1942, when he declared: "Evolution itself is accepted by zoologists not because it has been observed to occur or can be proved by logically coherent evidence to be true, but because the

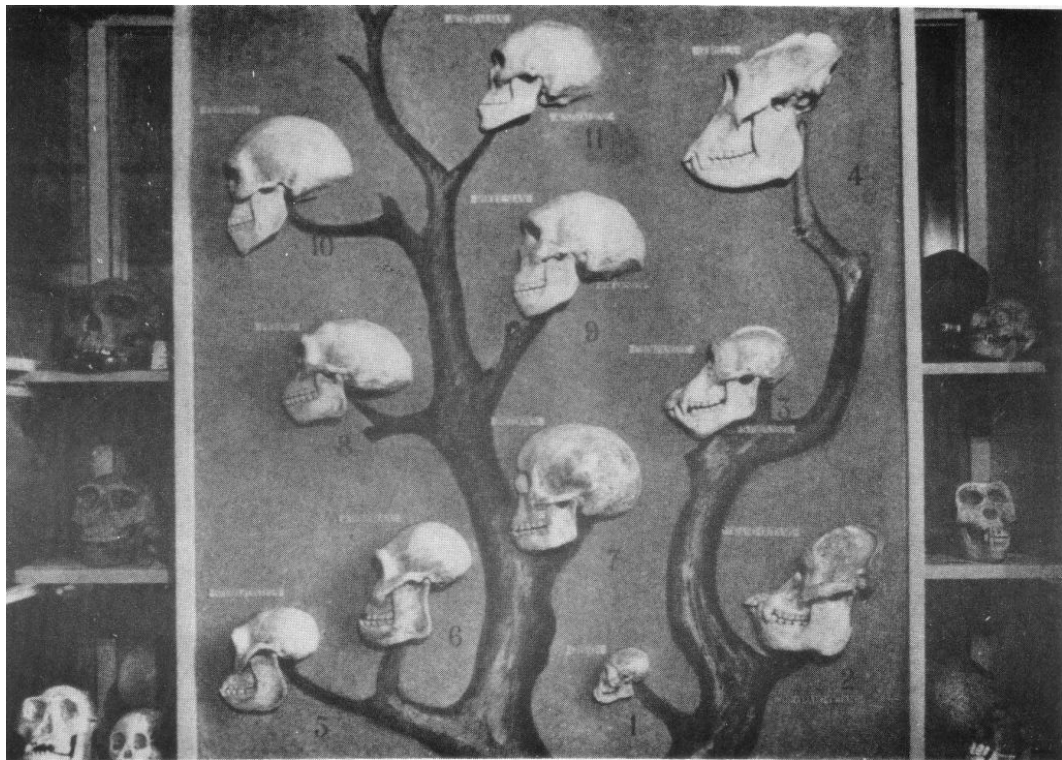
only alternative, special creation, is clearly incredible.”

So evolution cannot be proved or disproved. Some of Darwin’s arguments have failed to stand the test of time. Various skulls dug up in Africa and other countries have been placed in glass-cases in the British Museum and elsewhere in support of the great theory. I have examined them with deep interest but without expert knowledge. Possibly that is not a handicap, as these skulls have caused much controversy among the evolutionists themselves, and I shall come to them soon. Before passing on, however, I would like to give one more glance at “the fish that played the violin”.

If the scientists are right about that wonderful fish you would expect to find transitional or intermediate forms, as at Coney Island – half fish, half

reptile, for example; or, millions of years later, half reptile, half mammal. You do not find such forms. If one species has indeed become another very different species, it has not yet been demonstrated. Fossils reveal new types, not the magic process of a reptile becoming a bird. Incidentally, if you ask the evolutionist how a bird first grew wings, he will regard it as very bad taste. But I still want to know. Was it by wishing?

Now for the skulls. Many ancient skulls were found with the bones of extinct animals in different countries, but until last century it was not considered possible that the human and animal remains might belong to the same periods. No one questioned the Biblical account of the creation. No one imagined that man had lived on earth for more than six thousand



Various skulls dug up in Africa and other countries have been placed in glass-cases in the British Museum and elsewhere in support of the great theory ... These skulls have caused much controversy among evolutionists themselves.

years. About the middle of last century, however, a few scientists were beginning to recognize primitive man and his implements; and the discovery of the Neanderthal skull in Germany opened a new era in ideas about man's ancestry.

Neanderthal man had queer, massive eyebrow ridges, a receding forehead and heavy, flattened skull. When the Darwinian theory was announced shortly after this discovery, certain scientists acclaimed Neanderthal man as an ape-man. The eyebrow ridges, they pointed out, linked him with the gorilla. Later anatomists, however, have proved that man is not a close physical relative of either the gorilla or the chimpanzee. The ridges in Neanderthal man were not proof of simian origin because the early apes did not have these ridges.

After long controversy Neanderthal man has been accepted as a true human being who first came on the European scene about one hundred and fifty thousand years ago. Similar beetle-browed ruffians were found later elsewhere in Europe and the Middle East and later still in Africa; all the way down Africa almost to the southern tip. Thus we have Rhodesian Man from Broken Hill, and even earlier "hand-axe" types from Makapansgat two hundred miles from Johannesburg, and Saldanha Man who lived within a couple of days march from the present Cape Town.

They were all cave men, using stone implements – the most primitive of all human forms known to science. That is one reason why Africa is now regarded as the cradle of mankind. Similar men also existed in North

Africa at a time when much of Europe was covered by glaciers. Europe has been ruled out as the birthplace of mankind because of the Ice Age. Between the heart of Africa and the Himalayas there stretched territories warm enough to allow human life to survive. It was free from ice and ocean, a great belt where the primitive, naked hunter would neither freeze nor starve nor drown.

Nevertheless, the Neanderthal / Rhodesian / Saldanha species has not come down unchanged to our own day. He is extinct. Possibly he merged with his successors, a modified Neanderthal type; but that striking eyebrow ridge has vanished.

Could the original Neanderthal man talk, or did he grunt like an animal? Well, the evolutionists now concede that Neanderthal man was a full man,

not an animal, and speech is one of the great differences between man and the beasts. Language is in itself a deep mystery. The cleverest scientists have failed completely to discover the origin of speech. Even the great brain of Darwin produced a ludicrous explanation. Animal sounds do not help us to trace the beauties of language, and the ten calls of the gibbon mentioned by Darwin have been discarded by modern philologists. It seems to be as insoluble a riddle as the origin of the universe.

Another skull which put Africa on the “missing link” map was discovered on the dissecting table at the University of Cape Town by Professor M. R. Drennan, the anatomist. It was a Hottentot skull, but Drennan’s measurements showed that it was similar to fossil Boskop skulls. Relics

of Boskop Man are found all over Africa. Boskop Man may have been the most ancient form of *Homo sapiens*; and it was most interesting to observe that the modern Hottentots were direct descendants of the large-skulled Boskop race.

I have mentioned the Taungs skull, which is another controversial fragment. Eminent anatomists have disputed Dart's opinion. At the time of the Taungs discovery in 1925 scientists were seeking "missing links" in Asia, and it seemed incredible that South Africa should come into the picture. Chimpanzees belonged to the great equatorial forests, not the Bechuanaland desert. Dart's skull was a chimpanzee, clearly enough. Everyone had to admit that. But they refused to admit that it was a "missing link". It was just another chimp.

Dart and his co-worker, the late Dr. Robert Broom, unearthed and described many other skulls at Sterkfontein and elsewhere which scientists identified, according to their whims and prejudices, as anthropoid ape or apeman or true man. Broom was a medical practitioner until J. H. Hofmeyr made it possible for him to devote his full time to archaeology. He lived to a great age, and was regarded by his colleagues as the world's most distinguished comparative anatomist. I like reading Broom's views, for he was a modest scientist, always ready to admit his ignorance rather than invent a fantastic theory.

Broom often used the term "missing link" in his writings, but most scientists dislike it. Perhaps it is because of their failure to discover an undeniable "missing link". They prefer to talk



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bout “bridge forms”. Broom believed that the human line arose in Africa about twenty-five million years ago from a primitive anthropoid. Why this creature should have become a man he was unable to say.

Africa’s position as the cradle has been strengthened by the discoveries of Dr. L. S. B. Leakey of Nairobi, a museum director. Leakey, about a quarter of a century ago, identified the oldest human fragment Africa has yielded to the scientists. This was the chin region of a human mandible with a few teeth, and the age was estimated at seven hundred thousand years. It is significant, perhaps, that these front teeth might have belonged to a modern man. They were completely human. Yet the previous scientific view was that true man did not exist at that period. He is supposed to have come on

the scene only within the last one hundred thousand years. So it is interesting to note that the oldest man ever found in the “cradle of man” was no missing link but a true human being.

It was in East Africa, too, that Leakey discovered the remains of an ape, thirty million years old, which scientists call Proconsul. Some say this was man’s ancestor, others say it was merely the ancestor of the apes. Dr. Johannes Hurler of the Basel Natural History Museum has produced evidence, accepted in some circles, suggesting that true man is one hundred million years old, and therefore older than the apes. There is a strong tendency to push the time of man’s origin farther and farther back, and each stage has its fossil evidence.

Another great supporter of the African cradle theory was the late Sir Arthur

Keith. He was born in 1860, the same year as Broom, and like Broom he received his medical training in Scotland. These two men corresponded for many years. Keith argued that man shared points of structure with the living anthropoids which were so numerous and intimate that common ancestry was obvious. Those anthropoids lived in Africa; therefore Africa was the cradle, with the highlands of Kenya and Uganda as the most likely centre.

Broom, it may be noted, remarked that resemblances between the higher living anthropoids and some types of man were merely due to parallel development, and did not indicate any close affinity.

Keith worked out his own evolution theory, which I find ingenious rather than convincing. He said that migrating

groups of apes spread out all over Africa and crossed (by land, before the Red Sea appeared) into Asia and other parts of the Old World. The different groups evolved in isolation, crossing the mental Rubicon between beast and man in the dark Pliocene times seven millions years ago, and becoming true men about one million years ago.

Many peoples of Africa, according to Keith, are black because the African gorilla and chimpanzee have black skins. Cousins of these anthropoids carried the dark pigmentation to the ends of the earth. Thus the ancestors of all races were dark; but changes in climate, environment and diet turned some of the migrants into white people. Those who remained in Africa and other hot countries needed their dark skins to protect them from the sun, and so they remained dark. Keith used the

gene theory of heredity to explain the African woolly hair, so different from the straight hair of the great apes; but he admitted that he was not satisfied with this explanation. However, he argued that because the African anthropoids varied widely, some being massive like the gorilla and others being dwarfs, so the migrants had within them a wide range of statures and types. He thought the Hottentots might have evolved from the same ancestral simian stock as the Mongolians, Both races are yellow, with similar faces.

Colour is a mystery still. G. Elliot Smith, the anatomist, agreed with Keith on this point. He thought that all humans were once black, and that the blond Nordics, olive-brown Mediterranean types and yellow Mongols had become bleached.

Darwin favoured a white primitive man. Dr. M. D. W. Jeffreys of Witwatersrand University suggests that the original skin colour may have been dark because the main pigment in skin colour is melanin, meaning black; and it is easier to lose a physical trait than gain one. In Africa the pigmented skin had a survival value, but when the dark-skinned people left Africa and settled in cold territories the change occurred. A black skin loses heat quicker than a white one. They needed white skins, and the bitter climate operated selectively and allowed only those with lighter skins to survive. So the white man appeared, a descendant of black ancestors.

When the migrant groups of Keith's theory separated they were all still "in the rough". They evolved independently of each other, but thanks to

“parallel evolution” the contrasts were not really sensational. Though they might differ greatly in colour, height, facial types, language and so on, they were all of one species, all able to interbreed easily.

My respect for such authorities as Keith and Broom would be deeper were it not for the ludicrous affair of the Piltdown skull. Do you remember that exposure? It was far more humiliating for most of the world’s leading scientists than the American “dawn ape” I have quoted, the one that was really a pig. Great men staked their reputations on the Piltdown skull – and lost.

If it had been genuine, the Piltdown skull would have been a “missing link”. It seemed to be a primitive human skull with the jaw of a chimpanzee. Evolutionists went mad with

delight at this spectacle. One biologist, an American named R. S. Lull, declared that the jaw could not have formed part of the skull; but he was howled down immediately. Keith pronounced the Piltdown skull as genuine and summed up; “If we are convinced that evolution is the true method of creation and that man and anthropoid have been evolved from a common ancestry, what is more probable than that we should find early human forms in which anthropoid and human features are combined?”

Broom also gave much thought to *Eoanthropus*, the “dawn man”, as scientists had been pleased to call the Piltdown skull. He, too, examined it at the British Museum, accepted it, and ridiculed the idea that the jaw might not belong to the skull. Sir Arthur Smith-Woodward, another front rank scientist,

called the skull “the earliest Englishman”, and committed himself more deeply than anyone else. Another authority wrote: “That we should discover such a race as Piltdown, sooner or later, has been an article of faith in the anthropologist’s creed ever since Darwin’s time.”

So much for the men who tell us how the human race arose. Not long after World War II, flourine content, X-ray and chemical and other tests proved conclusively that the Piltdown skull could not be more than fifty thousand years old, and that the jaw had belonged to a chimpanzee which had probably died within living memory. It was a deliberate fake. Teeth had been filed down and the jaw made to fit the skull. The whole hoax appeared to have been planned and carried out by Charles Dawson, the amateur

archaeologist who had brought the skull to light. Dawson died in 1916, but of his guilt there can be little doubt. And his motive? One which I have given you earlier in this mystery of life and the scientists and their theories – personal aggrandizement.

Man, as you have seen, has lived in Africa for a long time. Yet the antiquity of man is a comparatively recent discovery, and the mysteries of the tools and art and way of life of primitive man are still being solved. Africa, in the prehistoric sense, has only been scratched. Here we are on firmer ground, though not all the secrets have been revealed.

Archaeology comes to life in South Africa because the, gap between the Stone Age and our own time is so small. Bushmen were cutting up their game with stone flakes, and painting

their caves, within living memory. I have met Bushmen who were using stone arrow-heads, and I would not be surprised to find a Bushman painter still at work in some far corner.

How unimaginative our ancestors were when they found the relics of prehistoric man! Stone Age artefacts, the bored stones and scrapers, hand-axes and weapons, are as easily identified as the everyday tools in an ironmonger's shop. Yet these stone objects, strewn over the face of South Africa; were called "thunderstones", fragments which had dropped from the sky. In Europe there was some excuse for this blindness, for specimens were comparatively rare. But in South Africa the land was littered with them. Every koppie with rock shelters, every river bank, every pan and vlei revealed a wealth of stone implements. Even

when they were dug up, the extraordinary legend persisted that these beautiful man-made things were freaks of nature from other worlds. Some called them "fairy darts", others spoke of "elfin stones". Superstitious people believed the stones had magic properties. One or two observant people suggested timidly that human craftsmen might have shaped the stones. This theory was not generally accepted until the middle of last century, when the French archaeologist Boucher de Perthes interpreted the various implements correctly:

I think the "discoverer" of South Africa's stone implements was Mr. Thomas Holden Bowker of Tharfield in the Albany district. He was attending the colonial legislature in Cape Town in or about 1860 when Mr.

Edgar Layard, the museum curator, showed him a collection of flint implements which had just arrived from Denmark. Bowker then realized that flakes he had picked up on his own farm were very similar to the Danish specimens. Bowker was interested in archery, and he had used stone arrow-heads for his own arrows without realizing that they had been specially made for the purpose by primitive man.

When he returned to his farm, Bowker sent a parcel of stone implements to the museum. Mrs Dale, wife of Dr. (later Sir Langham) Dale, superintendent-general of education, was present when Layard opened the parcel. Soon afterwards Mrs Dale was out walking near her home on the Cape Flats with a visitor from England. The visitor noticed a peculiar stone and picked it

up. "Well, if we were not in South Africa, where no flint instruments have ever been discovered, I should say that I had picked up a stone arrow-head," remarked the visitor.

Mrs Dale then saw that the stone was similar to those Layard had shown her. They explored the site and soon found a number of cores, chips and coarse pottery. Layard was able before long to send a collection of stone implements from the Cape for exhibition in London. The experts agreed that the stones were man's handiwork. It seems strange that there should have been any doubt about it, for these discoveries were made less than a century ago. However, the London opinion settled the matter, and the search for man's ancestors in South Africa had started.

Sir Langham Dale and Layard were the pioneers of this search. They made an

important early discovery near Cape Town where Woltemade cemetery now stands. Dale corresponded with archaeologists in England, including Lord Avebury and the Duke of Argyle; and many of Dale's finds are to be seen in the British Museum and the South African Museum. Dale was the man who first linked the Bushmen and Hottentots with the stone implements. It sounds elementary today, but it was a shrewd deduction at a time when people believed that stone implements fell to earth like meteorites. Such were the mysteries of last century. I wish that the mystery of the cradle of mankind could be solved as easily.

Man came out of the darkness. That may have been the dark heart of Africa, but I shall never know. No direct ancestor of man has ever been found. The age of man is a mystery. His

discovery of fire cannot be dated. Scientists give us their opinions flavoured with their own prejudices. "There is no such thing as science, but only theories in the minds of the scientists," wrote Professor Denis Saurat. Palaeontology has been called "a field full of uncertainty and error". Wise old Broom pointed out that "anthropology is not yet a very exact science".

I like the summing up of Leslie Paul, the English author, poet and writer on evolution: "The more one ponders the mystery of man, the less probable it seems that one misshapen Hominoid blundered into the realm of the specifically human, and the more probable it is that man was *called* into it, or even *commanded* into it, by Divine act."

So we have mysteries which are beyond the minds of scientists, and

that great truth was put very humbly by one genius born in the cradle of Africa, Jan Christian Smuts. “Our knowledge is too fragmentary, our interpretation of what we do know too vague and uncertain to entitle us to definite conclusions,” Smuts wrote. “It appears to be a great Plan – with a Planner in the background. I look for something in the nature of the universe to account for what has happened. And that something must be both physical and organic and mental, and also much more. But really I don’t pretend to know or understand.”

THE END

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